

# GTX300010

# DSB Damage Recognition Antibody Panel – MRN complex

#### **Product Content**

Cat No	Product Name	Reactivity	Application	Package
GTX133883	NBS1 (phospho Ser343) antibody	Human	WB	25 μΙ
GTX213110- 01	Goat Anti-Rabbit IgG antibody (HRP)	Rabbit	WB, IHC-P, ELISA	25 μΙ
GTX628789	Histone H2A.XS139ph (phospho Ser139) antibody [GT2311]	Human, Mouse, Rat	WB, ICC/IF, IHC-P, IP	25 μΙ
GTX70212	Mre11 antibody [12D7]	Human	WB, ICC/IF, IHC-P, IP, ELISA, Functional Assay, PLA	25 μΙ
GTX70222	NBS1 antibody [1C3]	Human, Mouse	WB, ICC/IF, IP	25 μΙ
GTX70228	Rad50 antibody [13B3]	Human, Mouse, Rat, Monkey	WB, ICC/IF, IHC-P, IP, ChIP assay, IHC, in vitro, PLA	25 μΙ

#### Note

For In vitro laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



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# NBS1 (phospho Ser343) antibody

# Cat. No. GTX133883

Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application	WB
Reactivity	Human

Package 100 μΙ, 25 μΙ

# APPLICATION

#### **Application Note**

\*Optimal dilutions/concentrations should be determined by the researcher.

Suggested dilution	Recommended dilution
WB	1:500-1:3000
Not tested in other applications.	

**Calculated MW** 85 kDa. ( Note )

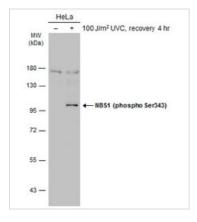
PROPERTIES	
Form	Liquid
Buffer	PBS, 1% BSA, 20% Glycerol
Preservative	0.025% ProClin 300
Storage	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.
Concentration	0.97 mg/ml (Please refer to the vial label for the specific concentration.)
Immunogen	Carrier-protein conjugated synthetic peptide surrounding phospho Ser343 of human NBS1. The exact sequence is proprietary.
Purification	Purified by antigen-affinity chromatography.
Conjugation	Unconjugated
Note	For laboratory research use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.
Note	Purchasers shall not, and agree not to enable third parties to, analyze, copy, reverse engineer or otherwise attempt to determine the structure or sequence of the product.



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# DATA IMAGES



## GTX133883 WB Image

Untreated (-) and treated (+) HeLa whole cell extracts (30  $\mu$ g) were separated by 7.5% SDS-PAGE, and the membrane was blotted with NBS1 (phospho Ser343) antibody (GTX133883) diluted at 1:500. The HRP-conjugated anti-rabbit IgG antibody (GTX213110-01) was used to detect the primary antibody.



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# Goat Anti-Rabbit IgG antibody (HRP)

# Cat. No. GTX213110-01

Host	Goat
Clonality	Polyclonal
Isotype	IgG
Application	WB, IHC-P, ELISA
Reactivity	Rabbit

Reference (501) Package 1 ml

# APPLICATION

#### **Application Note**

\*Optimal dilutions/concentrations should be determined by the researcher.

Suggested dilution	Recommended dilution
WB	Assay dependent
IHC-P	1:100-1:1000
ELISA	Assay dependent

Not tested in other applications.

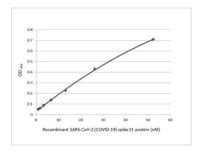
PROPERTIES	
Form	Liquid
Buffer	0.05M Tris, 0.15M NaCl, 1%BSA
Preservative	0.025% ProClin 300
Storage	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.
Concentration	0.5 mg/ml (Please refer to the vial label for the specific concentration.)
Immunogen	Highly purified whole rabbit IgG
Purification	Purified by antigen-affinity chromatography.
Conjugation	Horseradish peroxidase(HRP)
Note	For laboratory research use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.
	Purchasers shall not, and agree not to enable third parties to, analyze, copy, reverse engineer or otherwise attempt to determine the structure or sequence of the product.



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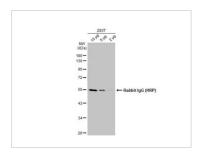
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## DATA IMAGES



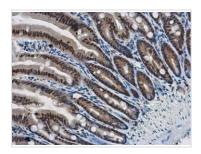
## GTX213110-01 ELISA Image

Indirect ELISA analysis performed by coating plate with recombinant SARS-CoV-2 (COVID-19) Spike S1 protein, His tag (active) (GTX135817-pro) (52.15-0.81 nM). Coated protein was probed with SARS-CoV-2 (COVID-19) Spike S1 antibody [HL134] (GTX635671) (1 µg/mL). Goat anti-rabbit lgG antibody (HRP) (GTX213110-01) (1:10000) was used to detect bound primary antibody.



#### GTX213110-01 WB Image

Various whole cell extracts were separated by 10% SDS-PAGE, and the membrane was blotted with Rabbit IgG antibody (HRP) (GTX213110-01) diluted at 1:10000.



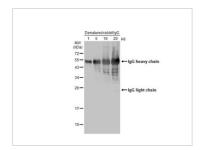
#### GTX213110-01 IHC-P Image

WBP11 antibody detects WBP11 protein at nucleus in mouse intestine by immunohistochemical analysis. Sample: Paraffin-embeddedmouse intestine.

WBP11 antibody (GTX118654) diluted at 1:500.

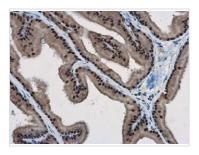
The signal was developed by Rabbit IgG antibody (HRP) (GTX213110-01)

Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



#### GTX213110-01 WB Image

Various amounts of denatured rabbit IgG protein were separated by 12% SDS-PAGE, and the membrane was blotted with HRP-conjugated anti-rabbit IgG antibody (GTX213110-01) diluted at 1:5000.



#### GTX213110-01 IHC-P Image

WBP11 antibody detects WBP11 protein at nucleus in rat prostate by immunohistochemical analysis. Sample: Paraffin-embedded rat prostate.

WBP11 antibody (GTX118654) diluted at 1:500.

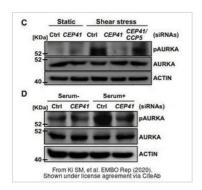
The signal was developed by Rabbit IgG antibody (HRP) (GTX213110-01).

Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



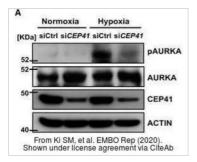
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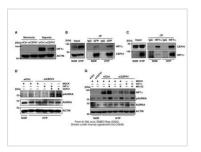
## GTX213110-01 WB Image

The data was published in the journal EMBO Rep in 2020. PMID: 31885126



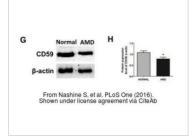
#### GTX213110-01 WB Image

The data was published in the journal EMBO Rep in 2020. PMID: 31885126



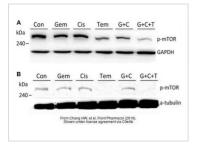
#### GTX213110-01 WB Image

The data was published in the journal EMBO Rep in 2020. PMID: 31885126



#### GTX213110-01 WB Image

The data was published in the 2016 in PLoS One. PMID: 27486856



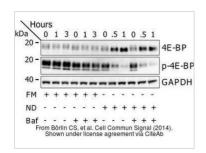
## GTX213110-01 WB Image

The data was published in the journal Front Pharmacol in 2018. PMID: 30087612



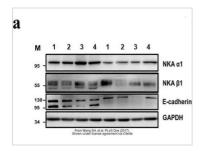
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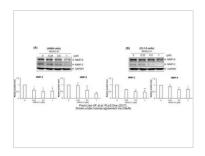
## GTX213110-01 WB Image

The data was published in the journal Cell Commun Signal in 2014. PMID: 25214434



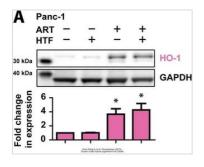
# GTX213110-01 WB Image

The data was published in the journal PLoS One in 2017. PMID: 28832634



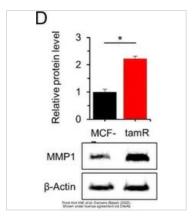
## GTX213110-01 WB Image

The data was published in the journal PLoS One in 2017. PMID: 28945763



# GTX213110-01 WB Image

The data was published in the journal Oncoscience in 2015. PMID: 26097885



# GTX213110-01 WB Image

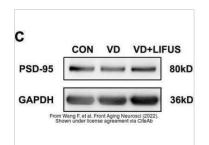
The data was published in the 2022 in Cancers (Basel). PMID: 35267540



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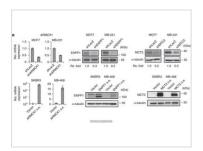
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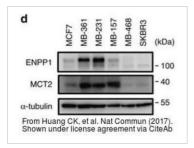
## GTX213110-01 WB Image

The data was published in the 2022 in Front Aging Neurosci. PMID: 35264943



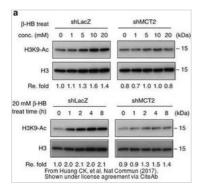
## GTX213110-01 WB Image

The data was published in the 2017 in Nat Commun. PMID: 28281525



## GTX213110-01 WB Image

The data was published in the 2017 in Nat Commun. PMID: 28281525



# GTX213110-01 WB Image

The data was published in the 2017 in Nat Commun. PMID: 28281525



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# Histone H2A.XS139ph (phospho Ser139) antibody [GT2311]

# Cat. No. GTX628789

Host	Mouse
Clonality	Monoclonal
Isotype	lgG1
Application	WB, ICC/IF, IHC-P, IP
Reactivity	Human, Mouse, Rat

Reference (18) Package 100 µl, 25 µl

# APPLICATION

#### **Application Note**

\*Optimal dilutions/concentrations should be determined by the researcher.

Suggested dilution	Recommended dilution
WB	1:500-1:3000
ICC/IF	1:100-1:1000
IHC-P	1:100-1:1000
IP	1:100-1:500

Not tested in other applications.

Calculated MW 15 kDa. (Note)

PROPERTIES	
Form	Liquid
Buffer	PBS
Preservative	No preservative
Storage	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.
Concentration	0.92 mg/ml (Please refer to the vial label for the specific concentration.)
Immunogen	Carrier-protein conjugated synthetic peptide surrounding phospho Ser139 of human Histone H2A.X. The exact sequence is proprietary.
Purification	Affinity purified by Protein G.
Conjugation	Unconjugated



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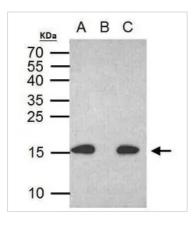
€ 886-3-6208988 📻 886-3-6208989 🐷 infoasia@genetex.com

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#### Note

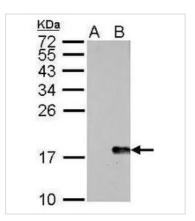
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#### DATA IMAGES



#### GTX628789 IP Image

Histone H2A.X (phospho S139) antibody immunoprecipitates histone H2A.X (phospho S139) protein in IP experiments. IP Sample:  $500 \mu g$  HCT116 with CPT  $30 \mu M$  treatment  $24 \mu m$  whole cell lysate/extract A.  $30 \mu g$  HCT116 whole with CPT  $30 \mu M$  treatment cell lysate/extract B. Control with  $2 \mu g$  of preimmune mouse IgG C. Immunoprecipitation of histone H2A.X (phospho S139) protein by  $2 \mu g$  histone H2A.X (phospho S139) antibody (GTX628789) 15% SDS-PAGE The immunoprecipitated histone H2A.X (phospho S139) protein was detected by Human histone H2A.X (phospho S139) antibody (GTX628789) diluted at 1:1000. EasyBlot antimouse IgG (GTX221667-01) was used as a secondary reagent.



#### GTX628789 WB Image

Histone H2A.X (phospho S139) antibody [GT2311] detects H2AFX protein by western blot analysis.

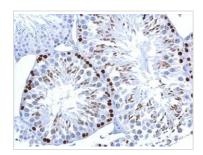
A. 30 µg NIH-3T3 whole cell lysate/extract (untreated)

B. 30  $\mu g$  NIH-3T3 whole cell lysate/extract (30  $\mu M$  cisplatin treatment for 24hr)

15% SDS-PAGE

Histone H2A.X (phospho S139) antibody [GT2311] (GTX628789) dilution: 1:1000

The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody.



## GTX628789 IHC-P Image

Histone H2A.XS139ph (phospho Ser139) antibody [GT2311] detects Histone H2A.XS139ph (phospho Ser139) protein at nucleus on mouse testis by immunohistochemical analysis.

Sample: Paraffin-embedded mouse testis.

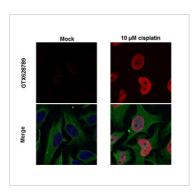
Histone H2A.XS139ph (phospho Ser139) antibody [GT2311] (GTX628789) dilution: 1:500.

Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min



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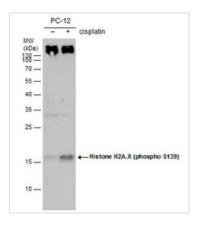
#### GTX628789 ICC/IF Image

Histone H2A.X (phospho Ser139) antibody detects H2AFX protein at nuclear by confocal immunofluorescent analysis.

Sample:  $10\mu M$  Cisplatin treated (right) or untreated (left) HeLa cells were fixed in 4% paraformaldehyde for 15 min.

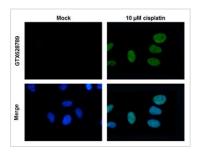
Red: H2A.X protein stained by Histone H2A.X (phospho Ser139) antibody (GTX628789) diluted at 1:500. Green: alpha Tubulin antibody (GTX102078) diluted at 1:1000.

Blue: Hoechst 33342 staining. [Images captured by Olympus FV1000 Confocal Laser Scanning Microscope]



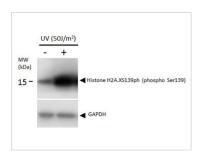
#### GTX628789 WB Image

Histone H2A.X (phospho S139) antibody [GT2311] detects Histone H2A.X (phospho S139) [GT2311] protein by western blot analysis. Un-treated (-) and treated (+, 30  $\mu$ M Cisplatin treatment for 24 hrs) PC-12 whole cell extracts (30  $\mu$ g) were separated by 15% SDS-PAGE, and the membrane was blotted with Histone H2A.X (phospho S139) antibody [GT2311] (GTX628789) diluted by 1:500. The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody.



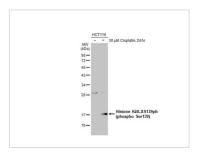
#### GTX628789 ICC/IF Image

Histone H2A.X antibody detects H2AFX protein at nuclear by immunofluorescent analysis. Sample:  $10\mu M$  Cisplatin treated (right) or untreated (left) HeLa cells were fixed in 4% paraformaldehyde for 15 min. Green: H2AFX protein stained by Histone H2A.Xantibody (GTX628789) diluted at 1:500. Blue: Hoechst 33342 staining.



### GTX628789 WB Image

Histone H2A.XS139ph (phospho Ser139) antibody detects Histone H2A.XS139ph (phospho Ser139) protein by western blot analysis. Un-treated (-) and treated (+, 50 J/m2 UV treatment) U2OS whole cell extracts (16 µg) were separated by 12%-15% SDS-PAGE, and the membrane was blotted with Histone H2A.XS139ph (phospho Ser139) antibody (GTX628789) diluted at 1:1000. The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody.



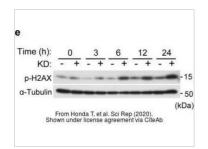
#### GTX628789 WB Image

Untreated (–) and treated (+) HCT116 whole cell extracts (30  $\mu$ g) were separated by 12% SDS-PAGE, and the membrane was blotted with Histone H2A.XS139ph (phospho Ser139) antibody [GT2311] (GTX628789) diluted at 1:1000. The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody, and the signal was developed with Trident ECL plus-Enhanced.



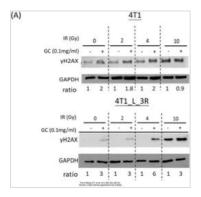
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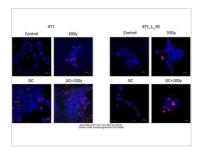
## GTX628789 WB Image

The data was published in the journal Sci Rep in 2020. PMID: 31980707



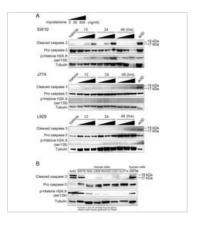
# GTX628789 WB Image

The data was published in the 2019 in Int J Mol Sci. PMID: 31717306



## GTX628789 ICC/IF Image

The data was published in the 2019 in Int J Mol Sci. PMID: 31717306



# GTX628789 WB Image

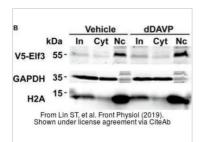
The data was published in the journal PLoS Negl Trop Dis in 2017. PMID: 28783752



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## GTX628789 WB Image

The data was published in the journal Front Physiol in 2019. PMID: 31681015



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# Mre11 antibody [12D7]

# Cat. No. GTX70212

Host	Mouse
Clonality	Monoclonal
Isotype	lgG1
Application	WB, ICC/IF, IHC-P, IP, ELISA, Functional Assay, PLA
Reactivity	Human



## PRODUCT

Summary

MRE11 antibody recognizes MRE11 protein, an enzyme with a predicted molecular weight of ~81 kDa. MRE11 forms the core of the MRN (MRE11-RAD50-NBS1) complex, one of the first components of the DNA damage response (DDR) to DNA double-strand breaks where it recruits other signaling factors required for repair. MRE11 has both exonuclease and endonuclease activities, and is responsible for the DNA binding of the complex.

## **APPLICATION**

#### **Application Note**

\*Optimal dilutions/concentrations should be determined by the researcher.

Suggested dilution	Recommended dilution
WB	1:500-1:3000
ICC/IF	1:100-1:1000
IHC-P	Assay dependent
IP	Assay dependent
ELISA	Assay dependent
Functional Assay	Assay dependent
PLA	Assay dependent
Not tected in other applications	

Not tested in other applications.

Calculated MW 81 kDa. (Note)

**Product Note** We do not recommend use of this product for Mouse, Rat samples.

PROPERTIES	
Form	Liquid
Buffer	PBS
Preservative	No Preservative
Storage	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.



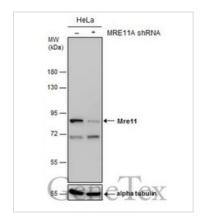
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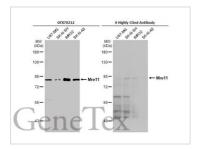
Concentration	0.45 mg/ml (Please refer to the vial label for the specific concentration.)
Immunogen	Amino acids 182-582 of Mre11 expressed in E. coli.
Purification	Protein G purified
Conjugation	Unconjugated
Note	For laboratory research use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.
	Purchasers shall not, and agree not to enable third parties to, analyze, copy, reverse engineer or otherwise attempt to determine the structure or sequence of the product.

# DATA IMAGES



## GTX70212 WB Image

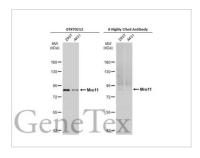
Non-transfected (–) and transfected (+) HeLa whole cell extracts (30  $\mu$ g) were separated by 7.5% SDS-PAGE, and the membrane was blotted with Mre11 antibody [12D7] (GTX70212) diluted at 1:500. The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody.



#### GTX70212 WB Image

Various whole cell extracts (30  $\mu$ g) were separated by 7.5% SDS-PAGE, and the membranes were blotted with Mre11 antibody [12D7] (GTX70212) diluted at 1:1000 and competitor's antibody diluted at 1:500. The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody.

\*The competitor is not affiliated with GeneTex and does not endorse this product.



# GTX70212 WB Image

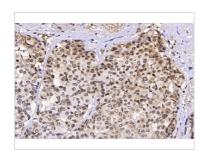
Various whole cell extracts (30  $\mu$ g) were separated by 7.5% SDS-PAGE, and the membranes were blotted with Mre11 antibody [12D7] (GTX70212) diluted at 1:1000 and competitor's antibody diluted at 1:1000. The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody.

\*The competitor is not affiliated with GeneTex and does not endorse this product.



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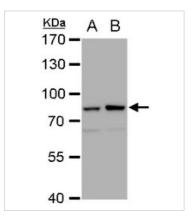
#### GTX70212 IHC-P Image

Mre11 antibody [12D7] detects Mre11 protein at nucleus by immunohistochemical analysis (Autostainer Formulated).

Sample: Paraffin-embedded human colon cancer.

Mre11 stained by Mre11 antibody [12D7] (GTX70212) diluted at 1:300.

Antigen Retrieval: EDTA buffer, 20 min



# GTX70212 WB Image

Mre11 antibody [12D7] detects Mre11 protein by western blot analysis.

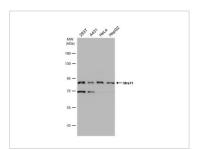
A. 30  $\mu g$  293T whole cell extract

B. 30  $\mu g$  whole cell extract of human Mre11-transfected 293T cells

7.5% SDS-PAGE

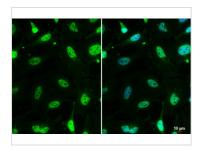
Mre11 antibody [12D7] (GTX70212) dilution: 1:1000

The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody.



# GTX70212 WB Image

Various whole cell extracts (30  $\mu$ g) were separated by 7.5% SDS-PAGE, and the membrane was blotted with Mre11 antibody [12D7] (GTX70212) diluted at 1:500. The HRP-conjugated anti-mouset IgG antibody (GTX213111-01) was used to detect the primary antibody.



## GTX70212 ICC/IF Image

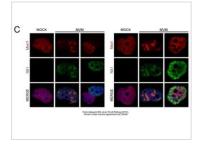
Mre11 antibody [12D7] detects Mre11 protein at nucleus by immunofluorescent analysis.

Sample: HeLa cells were fixed in 4% paraformaldehyde at RT for 15 min.

Green: Mre11 stained by Mre11 antibody [12D7] (GTX70212) diluted at 1:200.

Blue: Hoechst 33342 staining.

Scale bar= 10 µm.



#### GTX70212 ICC/IF Image

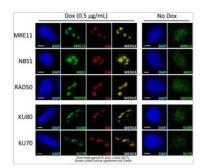
The data was published in the journal PLoS Pathog in 2010. PMID: 20949077



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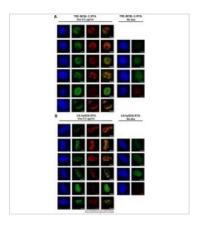
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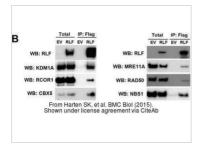
## GTX70212 ICC/IF Image

The data was published in the journal J Virol in 2017. PMID: 28855246



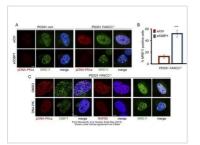
## GTX70212 ICC/IF Image

The data was published in the journal Viruses in 2015. PMID: 26057167



# GTX70212 WB Image

The data was published in the journal BMC Biol in 2015. PMID: 25857663



## GTX70212 ICC/IF Image

The data was published in the journal Nucleic Acids Res in 2016. PMID: 26446986

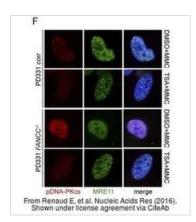


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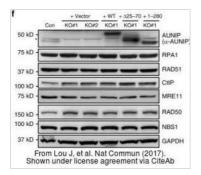
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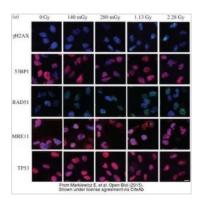
## GTX70212 ICC/IF Image

The data was published in the journal Nucleic Acids Res in 2016. PMID: 26446986



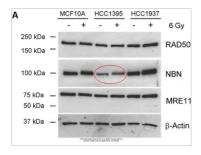
## GTX70212 WB Image

The data was published in the journal Nat Commun in 2017. PMID: 29042561



## GTX70212 ICC/IF Image

The data was published in the journal Open Biol in 2015. PMID: 25924630



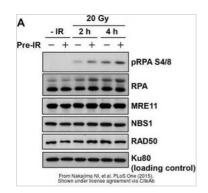
## GTX70212 WB Image

The data was published in the journal BMC Cancer in 2014. PMID: 24928521



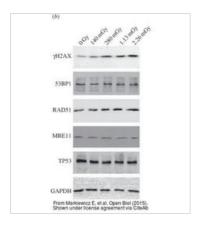
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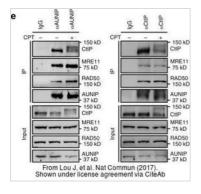
## GTX70212 WB Image

The data was published in the journal PLoS One in 2015. PMID: 25826455



## GTX70212 WB Image

The data was published in the journal Open Biol in 2015. PMID: 25924630



#### GTX70212 WB Image

The data was published in the journal Nat Commun in 2017. PMID: 29042561



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# NBS1 antibody [1C3]

# Cat. No. GTX70222

Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Application	WB, ICC/IF, IP
Reactivity	Human, Mouse

Reference (15) Package 100 μΙ

# APPLICATION

#### **Application Note**

\*Optimal dilutions/concentrations should be determined by the researcher.

Suggested dilution	Recommended dilution
WB	1:500-1:3000
ICC/IF	1:100
IP	Assay dependent
Not tested in other applications.	

**Calculated MW** 85 kDa. ( <u>Note</u> )

PROPERTIES	
Form	Liquid
Buffer	PBS, 20% Glycerol
Preservative	No Preservative
Storage	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.
Concentration	1 mg/ml (Please refer to the vial label for the specific concentration.)
Immunogen	The complete coding region of the human p95/NBS1 expressed in E. coli.
Purification	Protein G purified
Conjugation	Unconjugated
Note	For laboratory research use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.
	Purchasers shall not, and agree not to enable third parties to, analyze, copy, reverse engineer or otherwise attempt to determine the structure or sequence of the product.

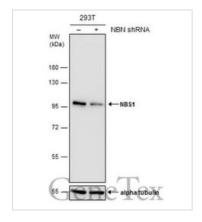


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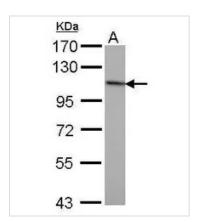


# DATA IMAGES



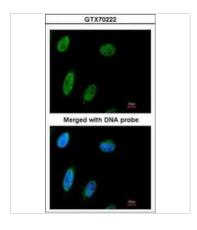
## GTX70222 WB Image

Non-transfected (–) and transfected (+) 293T whole cell extracts (30  $\mu$ g) were separated by 7.5% SDS-PAGE, and the membrane was blotted with NBS1 antibody [1C3] (GTX70222) diluted at 1:500.



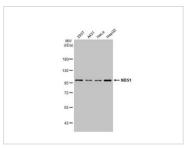
## GTX70222 WB Image

Sample (50 ug of whole cell lysate) A: mouse brain 7.5% SDS PAGE GTX70222 diluted at 1:1000



#### GTX70222 ICC/IF Image

Immunofluorescence analysis of HeLa, using NBS1(GTX70222) antibody at 1:100 dilution.



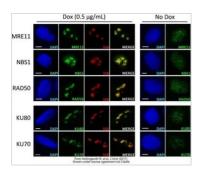
#### GTX70222 WB Image

Various whole cell extracts (30  $\mu$ g) were separated by 7.5% SDS-PAGE, and the membrane was blotted with NBS1 antibody [1C3] (GTX70222) diluted at 1:500. The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody.



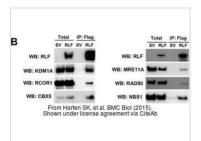
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## GTX70222 ICC/IF Image

The data was published in the journal J Virol in 2017. PMID: 28855246



# GTX70222 WB Image

The data was published in the journal BMC Biol in 2015. PMID: 25857663



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# Rad50 antibody [13B3]

# Cat. No. GTX70228

Host	Mouse
Clonality	Monoclonal
Isotype	lgG1
Application	WB, ICC/IF, IHC-P, IP, ChIP assay, IHC, in vitro, PLA
Reactivity	Human, Mouse, Rat, Monkey

Reference (120) Package 100 µl

# PRODUCT

Summary

Rad50 antibody detects RAD50, a ~154 kDa protein that, together with MRE11 and NBS1, forms the MRN complex that is intimately involved in DNA damage signaling, DNA double-strand break (DSB) repair, recombination, and replication. The complex is also involved other facets of genomic homeostasis including telomere maintenance. MRN plays a pivotal role in the DNA damage response (DDR) through interactions with ATM and ATR.

## **APPLICATION**

#### **Application Note**

\*Optimal dilutions/concentrations should be determined by the researcher.

Suggested dilution	Recommended dilution
WB	1:500-1:3000
ICC/IF	1:100-1:1000
IHC-P	1:100-1:1000
IP	Assay dependent
ChIP assay	Assay dependent
IHC	Assay dependent
in vitro	Assay dependent
PLA	Assay dependent

Not tested in other applications.

Calculated MW 154 kDa. (Note)

PROPERTIES	
Form	Liquid
Buffer	PBS
Preservative	No preservative
Storage	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.



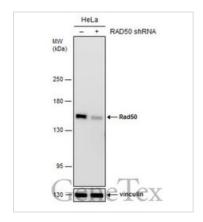
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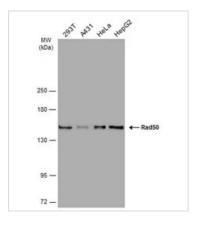
Concentration	1.7 mg/ml (Please refer to the vial label for the specific concentration.)
Immunogen	Amino acids 1-425 of Rad50 expressed in E. coli.
Purification	Affinity purified by Protein G.
Conjugation	Unconjugated
Note	For laboratory research use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.
	Purchasers shall not, and agree not to enable third parties to, analyze, copy, reverse engineer or otherwise attempt to determine the structure or sequence of the product.

# DATA IMAGES



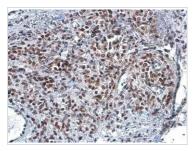
# GTX70228 WB Image

Non-transfected (–) and transfected (+) HeLa whole cell extracts (30  $\mu$ g) were separated by 5% SDS-PAGE, and the membrane was blotted with Rad50 antibody [13B3] (GTX70228) diluted at 1:500. The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody.



#### GTX70228 WB Image

Various whole cell extracts (30  $\mu$ g) were separated by 5% SDS-PAGE, and the membrane was blotted with Rad50 antibody [13B3] (GTX70228) diluted at 1:1000. The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody.



## GTX70228 IHC-P Image

Rad50 antibody [13B3] detects Rad50 protein at nucleus by immunohistochemical analysis. Sample: Paraffin-embedded human lung cancer.

Rad50 stained by Rad50 antibody [13B3] (GTX70228) diluted at 1:100.

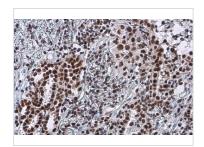
Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



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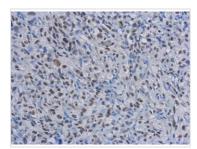
#### GTX70228 IHC-P Image

Rad50 antibody [13B3] detects Rad50 protein at nucleus by immunohistochemical analysis.

Sample: Paraffin-embedded human lung cancer.

Rad50 stained by Rad50 antibody [13B3] (GTX70228) diluted at 1:100.

Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



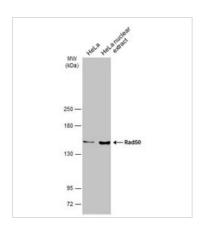
#### GTX70228 IHC-P Image

Rad50 antibody [13B3] detects Rad50 protein at nucleus in PC-3 xenograft by immunohistochemical analysis

Sample: Paraffin-embedded PC-3 xenograft.

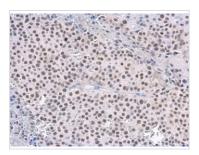
Rad50 antibody [13B3] (GTX70228) diluted at 1:200.

Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



#### GTX70228 WB Image

HeLa whole cell and nuclear extracts (30  $\mu$ g) were separated by 5% SDS-PAGE, and the membrane was blotted with Rad50 antibody [13B3] (GTX70228) diluted at 1:1000. The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody.



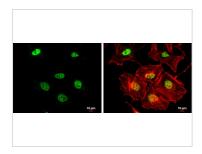
#### GTX70228 IHC-P Image

Rad50 antibody [13B3] detects Rad50 protein at nucleus in CAL 27 xenograft by immunohistochemical analysis.

Sample: Paraffin-embedded CAL 27 xenograft.

Rad50 antibody [13B3] (GTX70228) diluted at 1:200.

Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



#### GTX70228 ICC/IF Image

Rad50 antibody [13B3] detects Rad50 protein at nucleus by immunofluorescent analysis. Sample: HeLa cells were fixed in 4% paraformaldehyde at RT for 15 min.

Green: Rad50 protein stained by Rad50 antibody [13B3] (GTX70228) diluted at 1:200.

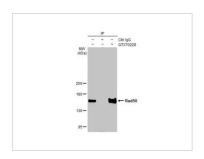
Red: phalloidin, a cytoskeleton marker, diluted at 1:200.

Scale bar =  $10 \mu m$ .



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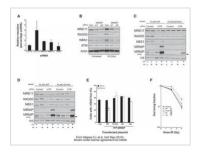


## GTX70228 IP Image

Immunoprecipitation of Rad50 protein from NT2D1 whole cell extract using 5 µg of Rad50 antibody [13B3]

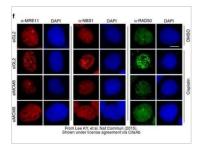
Western blot analysis was performed using Rad50 antibody [13B3] (GTX70228).

EasyBlot HRP-conjugated anti mouse IgG antibody (GTX221667-01).



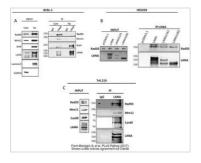
## GTX70228 WB Image

The data was published in the journal Cell Rep in 2016. PMID: 27568553



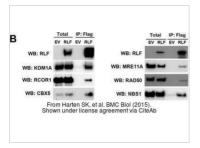
# GTX70228 ICC/IF Image

The data was published in the journal Nat Commun in 2015. PMID: 26215093



# GTX70228 WB Image

The data was published in the journal PLoS Pathog in 2017. PMID: 28430817



# GTX70228 WB Image

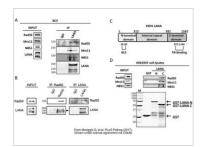
The data was published in the journal BMC Biol in 2015. PMID: 25857663



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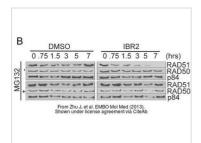
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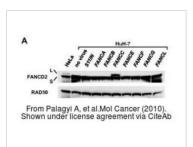
## GTX70228 WB IP Image

The data was published in the journal PLoS Pathog in 2017. PMID: 28430817



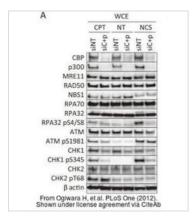
# GTX70228 WB Image

The data was published in the journal EMBO Mol Med in 2013. PMID: 23341130



## GTX70228 WB Image

The data was published in the journal Mol Cancer in 2010. PMID: 20509860



# GTX70228 WB Image

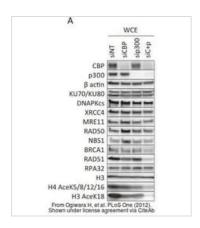
The data was published in the journal PLoS One in 2012. PMID: 23285190



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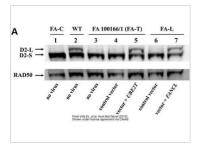
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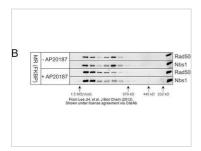
## GTX70228 WB Image

The data was published in the journal PLoS One in 2012. PMID: 23285190



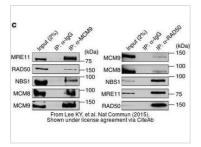
# GTX70228 WB Image

The data was published in the journal Hum Mol Genet in 2015. PMID: 26085575



## GTX70228 WB Image

The data was published in the journal J Biol Chem in 2013. PMID: 23525106



## GTX70228 WB Image

The data was published in the journal Nat Commun in 2015. PMID: 26215093



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