Laminin gamma 2 antibody [P2H]

Cat. No. GTX17686

Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Applications	WB, IHC-P, ELISA, IHC
Reactivity	Human, Mouse

References (1)
Package
100 µl

PRODUCT

Summary

Laminins, which consist of three subunits called alpha, beta and gamma chains, are major cell-adhesive components of extracellular matrix, especially basement membranes (BMs). The laminin family is constituted of over 15 isoforms, and each member is expressed in a tissue-specific manner and plays a differential role in each tissue. Laminin gamma 2 chain is a subunit of laminin-332 isoform, formerly laminin-5, but it is frequently overexpressed as a monomer form or the beta3-gamma2 heterodimer in invasive cancers. Laminin gamma 2 is a protein of approximately 150 kDa and cleaved at its short arm mainly by bone morphogenic protein-1 (BMP1) in cancer cells, releasing an N-terminal proteolytic fragment (gamma 2pf) of 45 kDa. The short arm and gamma 2pf are also cleaved by MMPs and serine proteinases, releasing further small N-terminal fragments.This antibody recognizes laminin gamma 2 chain of laminin-332 on normal epithelial basement membranes, while in malignant cancer tissues it strongly immunostains the cytoplasm of cancer cells at invasion fronts. Thus, P2H is an important antibody capable of highly detecting the tumor invasion marker laminin gamma 2 chain. P2H is an only commercially available antibody to detect the N-terminal proteolytic fragments of laminin gamma 2 chain in cancer tissues. It is useful for pathological assessment of invasiveness and malignancy in various types of human cancers.

Applications

Application Note

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

Suggested dilution	Recommended dilution
WB	1:1000-1:10000
IHC-P	Assay dependent
ELISA	Assay dependent
IHC	Assay dependent

Not tested in other applications.

Properties

Form	Liquid
Buffer	Ascites
Preservative	No preservative
Storage	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4ºC. For long-term storage, aliquot and store at -20ºC or below. Avoid multiple freeze-thaw cycles.
Immunogen	Recombinant human gamma 2pf containing domain IV + V. Epitope: gamma 2 domain V, NE2.

For full product information, images and publications, please visit our website.

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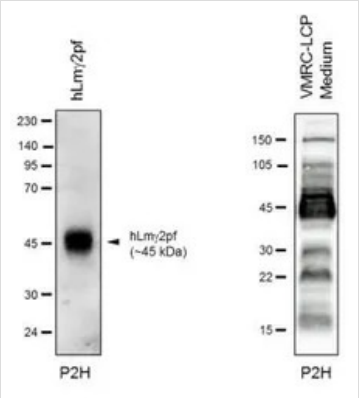
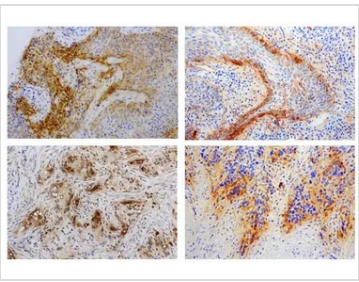
Purification	Unpurified
Conjugation	Unconjugated
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

DATA IMAGES



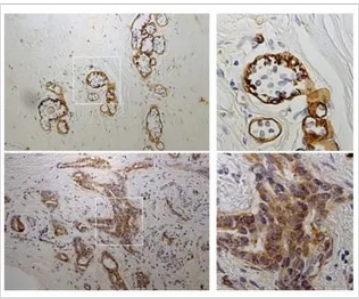
GTX17686 WB Image

WB analysis of various samples using GTX17686 Laminin gamma 2 chain (N-terminal region) antibody [P2H]. Small gamma 2 N-terminal fragments are seen below the gamma 2pf band (45 kDa), and 15-kDa bands corresponds to NE1-2 and NE2-3.
Left : recombinant human gamma 2pf under reducing conditions, 10% gel
Right : conditioned medium of VMRC-LCP lung cancer cells, gradient gel
Dilution : 1:1000



GTX17686 IHC-P Image

IHC-P analysis of invasive lung cancer (SCC and ADC) tissue using GTX17686 Laminin gamma 2 chain (N-terminal region) antibody [P2H]. The GTX17686 strongly detected cytoplasm of cancer cells at invasion fronts.
Upper panel : SCC
Lower panel : ADC



GTX17686 IHC-P Image

IHC-P analysis of normal mammary gland and breast cancer using GTX17686 Laminin gamma 2 chain (N-terminal region) antibody [P2H]. The GTX17686 stains basement membranes surrounding mammary glands in normal tissue, whereas in a breast cancer tissue cytoplasmic accumulation of gamma 2pf or its fragments is detected with P2H.
Upper panel : Normal mammary gland
Lower panel : Breast cancer

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