

Laminin 511 antibody [12D]

Cat. No. GTX17688

Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Applications	WB, IHC-Fr, IP, ELISA, Purification
Reactivity	Human

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-511 (Lm511) (formerly laminin-10), which consists of alpha 5, beta 1 and gamma 1 chains, appears at an early stage of development and is most widely expressed in adult tissues, mainly basement membranes of various epithelial tissues and vasculatures. Recently, laminin-511 is often used as a culture substrate for ES and iPS cells. This antibody specifically interacts with the trimeric structure of laminin-511 isoform but does not react with any of the alpha 5, beta 1 and gamma 1 chains in the reducing conditions. Furthermore, it has been validated that clone 12D does not react with any of laminins-111, -211, -332, -3B32, -411 and -521. Unlike conventional anti- alpha 5 antibodies, clone 12D distinguishes laminin-511 from laminin-521. This is an important tool to evaluate specific distribution and physiological functions of laminin-511. In human cancers, clone 12D detects small vascular vessels with high sensitivity and hence useful for evaluating tumor angiogenesis.

Applications

Application Note

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

Suggested dilution	Recommended dilution
WB	1:1000
IHC-Fr	Assay dependent
IP	Assay dependent
ELISA	Assay dependent
Purification	Assay dependent

Not tested in other applications.

Product Note

This antibody specifically interacts with the trimeric structure of laminin-511 isoform but does not react with any of the alpha 5, beta 1 and gamma 1 chains in the reducing conditions. Furthermore, it has been validated that clone 12D does not react with any of laminins-111, -211, -332, -3B32, -411 and -521. Unlike conventional anti- alpha 5 antibodies, clone 12D distinguishes laminin-511 from laminin-521.

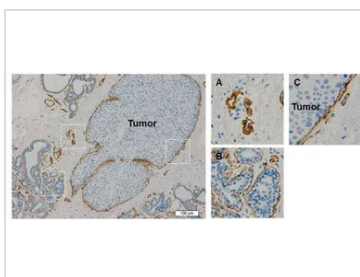
Properties

Form	Liquid
Buffer	Ascites



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Preservative	No preservatives
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.
Immunogen	Human placental laminin.
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.

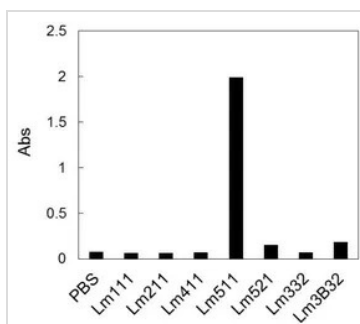
DATA IMAGES

GTX17688 IHC-Fr Image

IHC-Fr analysis of non-invasive breast carcinoma tissue using GTX17688 Laminin 511 antibody [12D].

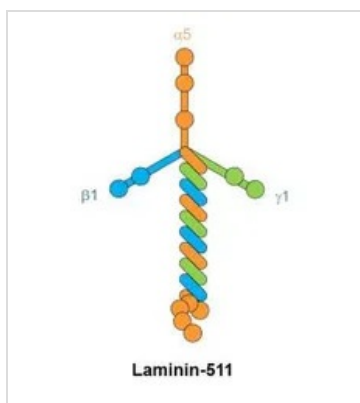
Image A : Vascular basement membrane

Image B : Mammary gland basement membrane

Image C : Basement membrane-like structures surrounding tumor cells


GTX17688 ELISA Image

ELISA analysis of seven recombinant human laminins using GTX17688 Laminin 511 antibody [12D].


GTX17688 Image

Protein structure of laminin-511



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