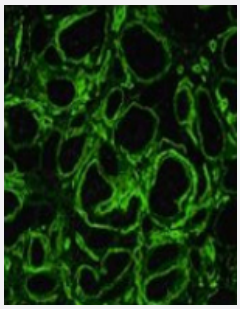
LAMA4 monoclonal antibody, clone 3H2

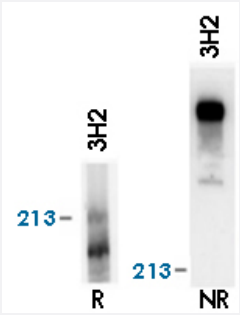
Catalog # MAB7869 Size 100 ug

Applications



Immunofluorescence

Immunofluorescence staining on human embryonic kidney with LAMA4 monoclonal antibody, clone 3H2 (Cat # MAB7869).



Western Blot (Cell lysate)

Reactivity of LAMA4 monoclonal antibody, clone 3H2 (Cat # MAB7869) on human platelet lysate by western blotting (reducing, R and nonreducing, NR conditions).

Specification

Product Description	Mouse monoclonal antibody raised against native LAMA4.
Immunogen	Immunoaffinity-purified Laminin 411 (laminin-8 (alpha4beta1gamma1) from platelets.
Host	Mouse
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Isotype	IgG1

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Recommend Usage	ELISA (0.02 ug/mL) Western Blot (0.5-1 ug/mL) Immunofluorescence Immunohistochemistry (5-10 ug/mL) Immunoprecipitation (0.5 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (0.09% sodium azide)
Storage Instruction	Store at -20°C. For long term storage store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Immunohistochemistry
- Immunofluorescence

  Immunofluorescence staining on human embryonic kidney with LAMA4 monoclonal antibody, clone 3H2 (Cat # MAB7869).
- Enzyme-linked Immunoabsorbent Assay
- Immunoprecipitation
- Western Blot (Cell lysate)

  Reactivity of LAMA4 monoclonal antibody, clone 3H2 (Cat # MAB7869) on human platelet lysate by western blotting (reducing, R and nonreducing, NR conditions).

Gene Info — LAMA4

Entrez GeneID	3910
Gene Name	LAMA4
Gene Alias	DKFZp686D23145, LAMA3, LAMA4*-1
Gene Description	laminin, alpha 4
Omim ID	600133
Gene Ontology	Hyperlink

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Gene Summary	Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes. They have been implicated in a wide variety of biological processes inc luding cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis. Lamin ins are composed of 3 non identical chains: laminin alpha, beta and gamma (formerly A, B1, and B2, respectively) and they form a cruciform structure consisting of 3 short arms, each formed by a different chain, and a long arm composed of all 3 chains. Each laminin chain is a multidomain prot ein encoded by a distinct gene. Several isoforms of each chain have been described. Different al pha, beta and gamma chain isomers combine to give rise to different heterotrimeric laminin isofor ms which are designated by Arabic numerals in the order of their discovery, i.e. alpha1beta1gam ma1 heterotrimer is laminin 1. The biological functions of the different chains and trimer molecules are largely unknown, but some of the chains have been shown to differ with respect to their tissue distribution, presumably reflecting diverse functions in vivo. This gene encodes the alpha chain is oform laminin, alpha 4. The domain structure of alpha 4 is similar to that of alpha 3, both of which r esemble truncated versions of alpha 1 and alpha 2, in that approximately 1,200 residues at the N- terminus (domains IV, V and VI) have been lost. Laminin, alpha 4 contains the C-terminal G doma in which distinguishes all alpha chains from the beta and gamma chains. The RNA analysis from a dult and fetal tissues revealed developmental regulation of expression, however, the exact functio n of laminin, alpha 4 is not known. Tissue-specific utilization of alternative polyA-signal has been d escribed in literature. Alternative splicing results in multiple transcript variants encoding distinct is oforms. [provided by RefSeq
Other Designations	OTTHUMP00000017039|OTTHUMP00000017043|laminin alpha 4 chain

Publication Reference

- Biologically relevant laminin as chemically defined and fully human platform for human epidermal keratinocyte culture.

  Monica Suryana Tjin, Alvin Wen Choong Chua, Aida Moreno-Moral, Li Yen Chong, Po Yin Tang, Nathan Peter Harmston, Zuhua Cai, Enrico Petretto, Bien Keem Tan, Karl Tryggvason

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- Laminin isoforms and their integrin receptors in glioma cell migration and invasiveness: Evidence for a role of alpha5-laminin(s) and alpha3beta1 integrin.

  Kawataki T, Yamane T, Naganuma H, Rousselle P, Anduren I, Tryggvason K, Patarroyo M.

  Experimental Cell Research 2007 Nov; 313(18):3819.

  Application: IHC-Fr, IP, Human, Glioblastoma, A172, KG1C, T98G, U251 cells

- An endothelial laminin isoform, laminin 8 (alpha4beta1gamma1), is secreted by blood neutrophils, promotes neutrophil migration and extravasation, and protects neutrophils from apoptosis.

  Wondimu Z, Geberhiwot T, Ingerpuu S, Juronen E, Xie X, Lindbom L, Doi M, Kortesmaa J, Thyboll J, Tryggvason K, Fadeel B, Patarroyo M.

  Blood 2004 Sep; 104(6):1859.

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Pathway

- ECM-receptor interaction
- Focal adhesion
- Pathways in cancer
- Small cell lung cancer

Disease

- Cleft Lip
- Cleft Palate
- Coronary Artery Disease
- Genetic Predisposition to Disease
- Tooth Abnormalities

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