

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Laminin α 4 in ELISAs. In direct ELISAs, no cross-reactivity with recombinant mouse Laminin alpha 4 or recombinant human Laminin alpha 3 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 839084
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Laminin α 4 Arg826-Ser1816 Accession # Q16363
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Immunocytochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Laminin α 4 (LAMA-4 [Laminin subunit alpha 4]; also Laminin-14/423, -8/411 and -9/421 subunit alpha) is a 180-230 kDa secreted member of the laminin family of molecules. It is found in the basement membranes of adipocytes, endothelial cells, cardiac and visceral smooth muscle cells, fibroblasts, keratinocytes, and pancreatic acinar cells. Laminin is a heterotrimeric glycoprotein that attaches cells to basement membranes. It is composed of covalently-linked α -, β - and γ -chains, and is known to attach cells to basement membranes. In the case of the α -subunit, this is mediated through binding to multiple integrins (α 3 β 1, α v β 3 and α 6 β 1), plus dystroglycan and the syndecans-2 and -4. Mature human Laminin α 4 is 1799 amino acids (aa) in length (aa 25-1823). It contains multiple domains, including four EGF-like domains (aa 82-255) and five Laminin G-like domains (aa 833-1820). There is a chondroitin sulfate attachment at the N-terminus that accounts for 20-30 kDa of MW. Laminin α 4 is cleaved between the Laminin G-like 3 and 4 domains, creating a soluble 44 kDa fragment that possesses antibacterial activity. There are two potential splice variants, one that shows a deletion of aa 266-272, and another that contains a 55 aa substitution for aa 66-1823. Over aa 826-1816, human Laminin α 4 shares 91% aa sequence identity with mouse Laminin α 4.

PRODUCT SPECIFIC NOTICES

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