

# Laminin 2 alpha Rabbit pAb

Laminin 2 alpha Rabbit pAb Catalog # AP59038

#### **Product Information**

**Application** IHC-P, IHC-F, IF

Primary Accession P24043

**Reactivity** Pig, Human, Mouse, Horse

Host Rabbit
Clonality Polyclonal
Calculated MW 343905
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human Laminin 2 alpha

Epitope Specificity 2051-2200/3122

**Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**SUBCELLULAR LOCATION** Secreted, extracellular space, extracellular matrix, basement membrane.

Note=Major component.

**SIMILARITY** Contains 17 laminin EGF-like domains.Contains 5 laminin G-like

domains.Contains 2 laminin IV type A domains.Contains 1 laminin N-terminal

domain.

**SUBUNIT** Laminin is a complex glycoprotein, consisting of three different polypeptide

chains (alpha, beta, gamma), which are bound to each other by disulfide bonds into a cross-shaped molecule comprising one long and three short arms with globules at each end. Alpha-2 is a subunit of laminin-2 (laminin-211

or merosin), laminin-4 (laminin-221 or S-merosin) and laminin-12

(laminin-213). Interacts with FBLN1, FBLN2 and NID2.

**DISEASE** Defects in LAMA2 are the cause of merosin-deficient congenital muscular

dystrophy type 1A (MDC1A) [MIM:607855]. MDC1A is characterized by difficulty walking, hypotonia, proximal weakness, hyporeflexia, and white

matter hypodensity on MRI.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** Laminin, an extracellular protein, is a major component of the basement

membrane. It is thought to mediate the attachment, migration, and organization of cells into tissues during embryonic development by interacting with other extracellular matrix components. It is composed of three subunits, alpha, beta, and gamma, which are bound to each other by disulfide bonds into a cross-shaped molecule. This gene encodes the alpha 2 chain, which constitutes one of the subunits of laminin 2 (merosin) and laminin 4 (s-merosin). Mutations in this gene have been identified as the cause of congenital merosin-deficient muscular dystrophy. Two transcript variants encoding different proteins have been found for this gene. [provided

by RefSeq, Jul 2008].

#### **Additional Information**

**Gene ID** 3908

Other Names Laminin subunit alpha-2, Laminin M chain, Laminin-12 subunit alpha,

Laminin-2 subunit alpha, Laminin-4 subunit alpha, Merosin heavy chain,

LAMA2, LAMM

Target/Specificity Placenta, striated muscle, peripheral nerve, cardiac muscle, pancreas, lung,

spleen, kidney, adrenal gland, skin, testis, meninges, choroid plexus, and

some other regions of the brain; not in liver, thymus and bone.

**Dilution** IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

#### **Protein Information**

Name LAMA2

Synonyms LAMM

**Function** Binding to cells via a high affinity receptor, laminin is thought to mediate the

attachment, migration and organization of cells into tissues during embryonic development by interacting with other extracellular matrix components.

**Cellular Location** Secreted, extracellular space, extracellular matrix, basement membrane.

Note=Major component

**Tissue Location** Placenta, striated muscle, peripheral nerve, cardiac muscle, pancreas, lung,

spleen, kidney, adrenal gland, skin, testis, meninges, choroid plexus, and

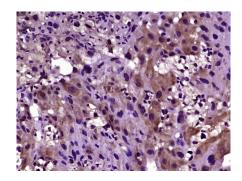
some other regions of the brain; not in liver, thymus and bone

## **Background**

Laminin, an extracellular protein, is a major component of the basement membrane. It is thought to mediate the attachment, migration, and organization of cells into tissues during embryonic development by interacting with other extracellular matrix components. It is composed of three subunits, alpha, beta, and gamma, which are bound to each other by disulfide bonds into a cross-shaped molecule. This gene encodes the alpha 2 chain, which constitutes one of the subunits of laminin 2 (merosin) and laminin 4 (s-merosin). Mutations in this gene have been identified as the cause of congenital merosin-deficient muscular dystrophy. Two transcript variants encoding different proteins have been found for this gene. [provided by RefSeq, Jul 2008].

### **Images**

Paraformaldehyde-fixed, paraffin embedded (mouse placenta tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Laminin 2 alpha) Polyclonal Antibody, Unconjugated (AP59038) at 1:400 overnight at



 $4^{\circ}\text{C},$  followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.