



Biotinylated Anti-mouse Laminin α 4 Antibody

ORDERING INFORMATION

Catalog Number: BAF3837

Lot Number: YPL01

Size: 50 μ g

Formulation: 0.2 μ m filtered solution in PBS with BSA

Storage: -20° C

Reconstitution: sterile 0.1% BSA in TBS

Specificity: mouse Laminin α 4

Immunogen: NS0-derived rmLaminin α 4 (aa 826 - 1816)

Ig Type: goat IgG

Applications: Western blot
Immunohistochemistry

Preparation

Produced in goats immunized with purified, NS0-derived, recombinant mouse Laminin alpha 4 C-terminal Laminin G-like domains (rmLaminin α 4; aa 826 - 1816; Accession # P97927). Mouse Laminin α 4 specific IgG was purified by mouse Laminin α 4 affinity chromatography and then biotinylated. Laminins are heterotrimeric glycoproteins and are major components of the basement membrane. Each Laminin is comprised of a single α , β , and γ chain that heterotrimerize via their coiled-coil domains to form a large cruciform-shaped molecule. Mature Laminin α 4 is a subunit of Laminin 411, Laminin 421, and Laminin 423. Mature Laminin α 4 is a 1792 amino acid (aa) residue protein that has a Laminin N-terminal domain, four Laminin EGF-like domains, the coiled-coil domain, and five C-terminal tandem Laminin G-like domains. The G-like domains contain binding sites for integrin, heparin, and dystroglycan. Within the region used as immunogen, mouse Laminin α 4 shows 91% and 97% aa sequence identity with human and rat Laminin α 4, respectively.

Formulation

Lyophilized from a 0.2 μ m filtered solution in phosphate-buffered saline (PBS) containing 50 μ g of bovine serum albumin (BSA) per 1 μ g of antibody.

Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 μ g/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for use as a detection antibody in the applications listed below.

Applications

Western blot - This antibody can be used at 0.1 - 0.2 μ g/mL with the appropriate secondary reagents to detect recombinant mouse Laminin α 4. The detection limit for rmLaminin α 4 is approximately 10 ng/lane under non-reducing and reducing conditions.

Immunohistochemistry - This antibody has been used at a concentration of 10 μ g/mL to detect mouse Laminin α 4 in cryosections of E11.5 mouse embryos. Tissue was fixed overnight in 4% PFA+14% picric acid in PBS at 4° C. Sections were blocked with 10% donkey serum and 0.1% Triton in 1% BSA in PBS for 45 minutes at room temperature. After blocking, sections were incubated with primary antibody for 3 hours at room temperature followed by fluorochrome-coupled streptavidin at room temperature for 1 hour. Between each step, sections were washed with 0.1% BSA in PBS.

Optimal dilutions should be determined by each laboratory for each application.