

DATASHEET

Collagen XVII (BP180) Clone NC16A-3 Monoclonal Antibody, Purified

Catalog Number: SIG-3780

Available Size: 1.0 mL

Description:

Monoclonal Antibody against Collagen XVII clone NC16A-3

Clone:

NC16A-3

Also Known As:

collagen alpha-1(XVII) chain; alpha 1 type XVII collagen; collagen XVII, alpha-1 polypeptide; 180 kDa bullous pemphigoid antigen 2

Host:

Mouse

IsoType:

IgG1

Species Reactivity:

Human

Intended Use:

****Research Use Only (RUO)****

This product is sold for laboratory research use only, not for human or in-vivo use.

Form:

Protein G Purified Antibody (in PBS with BSA + 0.1%NaN3)

Specificity:

Collagen XVII (BP180) is a transmembrane protein of the cutaneous basement membrane that plays an important role in epidermal-dermal adhesion. Collagen XVII has been associated with inherited bullous skin disease and with autoimmune disease.

Purified recombinant NC16a-domain of human collagen XVII was used as immunogen. The epitope of this clone is localized to amino acids 545 to 557 of collagen XVII. The expression of Collagen XVII during pregnancy is so far largely unknown, but Collagen XVII may play a role in trophoblast invasion, and therefore a role in placental formation. Research has indicated that Collagen XVII may also be found in amniotic fluid throughout pregnancy.

Concentrated Format:

SIG-3780-1000

Uses:

This antibody is effective in immunoblotting (WB) and immunohistochemistry (IHC).

Suggested Working Dilution:

The optimal working dilution should be determined for each specific assay condition.

- **WB:** 1:100
- **IHC:** $\geq 1:40$ for Biotin based detection systems such as USA Ultra Streptavidin Detection (SIG-32250) or ACUITY Advanced Polymer Detection (SIG-32902).

Tissue Sections: Formalin-fixed, paraffin-embedded tissues, frozen tissues.

Pretreatment: For optimal staining, the sections should be pretreated with an antigen unmasking solution such as Retrieve-All 3 (SIG-31902).

See reverse side for additional information

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Incubation: 60 minutes at room temperature.

Notes:

*Available without BSA and Azide upon request.

Predicted MW = 180kDa

Positive tissue (human): normal skin

Storage:

Store between 2-8°C.

References:

Asaka T, Akiyama M, Domon T, Nishie W, Natsuga K, Fujita Y, Abe R, Kitagawa Y, Shimizu H. Type XVII Collagen is a Key Player in Tooth Enamel Formation. *Am J Pathol* 174(1):91-100, 2009.

Huilaja L, Hurskainen T, Autio-Harmainen H, Hofmann SC, Sormunen R, Rasanen J, Ilves M, Franzke CW, Bruckner-Tuderman L, Tasanen K. Pemphigoid gestationis autoantigen, transmembrane collagen XVII, promotes the migration of cytotrophoblastic cells of placenta and is a structural component of fetal membranes. *Matrix Biol* 27:190-200, 2008.

Huilaja L, Hurskainen T, Autio-Harmainen H, Sormunen R, Tu H, Hofmann SC, Pihlajaniemi T, Bruckner-Tuderman L, Tasanen K. Glycine substitution mutations cause intracellular accumulation of collagen XVII and affect the post-translational modifications. Manuscript

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Stelkovic E, Korom I, Marczinovits I, Molnar J, Rasky K, Raso E, Ricsor L, Molnar B, Kopper L, Krenacs T. Collagen XVII/BP180 protein expression in squamous cell carcinoma of the skin detected with novel monoclonal antibodies in archived tissue using tissue microarrays and digital microscopy. *Appl Immunohistochem Mol Morphol*. 16(5):433-41, 2008.

Vaisanen L, Has C, Franzke C, Hurskainen T, Tuomi M-L, Bruckner-Tuderman L & Tasanen K. Molecular mechanisms of junctional epidermolysis bullosa: Coll5 domain mutations decrease the thermal stability of collagen XVII. *J Invest Dermatol* 125:1112-1118, 2005.

Warranty/Conditions:

Covance products may not be resold or modified for resale without prior written approval. All sales are subject to Covance Antibody Products Terms and Conditions of Sale.

Datasheet Revision Date:

11/6/2011

Related Products:

- ACUITY Advanced Biotin Free Polymer Detection System 50 Test DAB kit Catalog Number SIG-32902
- HMB-45 Monoclonal Antibody, Purified (SIGNET) Catalog Number SIG-3116
- MART-1 (M2-9E3) Monoclonal Antibody, Purified (SIGNET) Catalog Number SIG-38165
- Microphthalmia Transcription Factor (MITF) Monoclonal Antibody, Purified (SIGNET) Catalog Number SIG-3745
- Pan-Cytokeratin (AE1/AE3) Monoclonal Antibody, Purified (SIGNET) Catalog Number SIG-3464
- Ultra Streptavidin (USA) Horseradish peroxidase (HRP) 50 Test, Multi-Species, DAB Detection Kit (SIGNET) Catalog Number SIG-32250
- Retrieve-All Antigen Unmasking System 3: Acidic, 1x (SIGNET) Catalog Number SIG-31902