

Datasheet: VMA00095

BATCH NUMBER 170982

Description:	MOUSE ANTI DESMOPLAKIN
Specificity:	DESMOPLAKIN aa2344-2822
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	20B6
Isotype:	IgG1
Quantity:	100 µl

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			1/1000
Immunofluorescence	▪			

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Mouse monoclonal antibody purified by affinity chromatography on Protein A from tissue culture supernatant.
Buffer Solution	Phosphate buffered saline.
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃).
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml.
Immunogen	Recombinant fusion protein fragment consisting of the carboxyl terminus of desmoplakin,

fused with maltose binding protein.

**External Database
Links**

UniProt:

[P15924](#) [Related reagents](#)

Entrez Gene:

[1832](#) DSP [Related reagents](#)

Specificity

Mouse anti Human desmoplakin recognises a major protein component of the desmosome. Desmosomes are intercellular junctions that tightly link adjacent cells. Desmoplakin is a major high molecular weight protein (312 kDa) of desmosomes which anchor intermediate filaments to desmosomal plaques.

The N-terminus of desmoplakin is required for localization to the desmosome and interacts with the N-terminal region of plakophilin 1 to selectively recruit plakophilins to desmosomal plaques. Desmoplakin has also been shown to function as a transglutaminase substrate *in vitro*, suggesting that it may participate in cell adhesion at the intra-epidermal level.

Desmosomes are the most common type of intercellular junction in vertebrate epithelial cells. They are characterized by 2 forms of interaction with other cellular structures. Firstly, they form membrane anchorage sites for intermediate-size filaments, which are seen as electron-dense plaques evident beneath the plasma membrane. Secondly, a specific membrane core domain interacts with a corresponding domain of the plasma membrane of an adjacent cell, apparently mediating intercellular adhesion in a stable way. Mutations in the gene for this protein are the cause of several cardiomyopathies and keratodermas as well as some autoimmune diseases.

Mouse anti Human desmoplakin binds to an epitope between amino acids 2344-2822 of desmoplakin. This antibody has been extensively validated for western blotting using whole cell lysates.

Western Blotting

Anti desmoplakin antibody detects a band of approximately 332 kDa in HepG2 cell lysates.

Storage

Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Guarantee

12 months from date of despatch.

Acknowledgements

PrecisionAb is a trademark of Bio-Rad Laboratories.

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
<https://www.bio-rad-antibodies.com/SDS/VMA00095>

Regulatory

For research purposes only.

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M432945:240917'

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