

Rabbit Desmoplakin Polyclonal Antibody | anti-DSP antibody

Phospho-Desmoplakin (Ser165/Ser166) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329447	Rabbit	Human, Mouse, Rat Predicted Reactivity: Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (91%)	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Desmoplakin; Polyclonal Antibody; Phospho-Desmoplakin (Ser165/Ser166) Antibody; 250/210kDa paraneoplastic pemphigus antigen; Desmoplakin I; Desmoplakin II; DP I; DP II; DPI; DPII; DSP; KPPS2; PPKS2; anti-DSP antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (91%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-Desmoplakin (Ser165/Ser166) Antibody detects endogenous levels of Desmoplakin only when phosphorylated at Ser165/166. Tissue Specificity: Isoform DPI is apparently an obligate constituent of all desmosomes. Isoform DPII resides predominantly in tissues and cells of stratified origin.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-DSP antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Desmoplakin around the phosphorylation site of Ser165/166.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Ser-2849 is probably phosphorylated by a cAMP-dependent protein kinase. Phosphorylation on Ser-2849 probably affects its association with epidermal, simple cytokeratins and VIM intermediate filaments.
Subunit Structure	Homodimer. Interacts with COL17A1 (via cytoplasmic region). Associates (via C-terminal) with KRT5-KRT14 (via rod region), KRT8-KRT18 and VIM intermediate filaments. Interacts with DSC2. Interacts with PKP2. Interacts weakly with TMEM65 (By similarity).
Similarity	Its association with epidermal and simple keratins is dependent on the tertiary structure induced by heterodimerization of these intermediate filaments proteins and most likely involves recognition sites located in the rod domain of these keratins. The N-terminal region is required for localization to the desmosomal plaque and interacts with the N-terminal region of plakophilin 1. The three tandem plakin repeat regions in the C-terminus mediate binding to intermediate filaments. Belongs to the plakin or cytolinker family.
Subcellular Location	Cell junction>Desmosome. Cytoplasm>Cytoskeleton. Cell membrane. Note: Innermost portion of the desmosomal plaque. Colocalizes with epidermal KRT5-KRT14 and simple KRT8-KRT18 keratins and VIM intermediate filaments network (PubMed:12802069). Localizes at the intercalated disk in cardiomyocytes (By similarity).

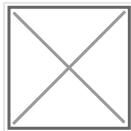
Preparation and Storage

Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
At 1/100 staining Mouse heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)
Staining Rat heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of extracts from A-431, using Phospho-Desmoplakin (Ser165/166) Antibody. Lane1 was treated with phospho-blocking peptide, Lane2 was treated with non-phospho-blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-DSP antibody	Major high molecular weight protein of desmosomes. Involved in the organization of the desmosomal cadherin-plakoglobin complexes into discrete plasma membrane domains and in the anchoring of intermediate filaments to the desmosomes.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	58530842
NCBI GeneID	1832
NCBI Accession #	NP_001008844.1
NCBI GenBank Nucleotide #	NM_001008844.1
UniProt Accession #	P15924; O75993; Q14189; Q9UHN4; B2RTT2; D7RX09
Molecular Weight	331,774 Da
NCBI Official Full Name	desmoplakin isoform II
NCBI Official Synonym Full Names	desmoplakin
NCBI Official Symbol	DSP
NCBI Official Synonym Symbols	DP; DPI; DPII
NCBI Protein Information	desmoplakin; desmoplakin I; desmoplakin II; 250/210 kDa paraneoplastic pemphigus antigen
UniProt Protein Name	Desmoplakin
UniProt Gene Name	DSP
UniProt Synonym Gene Names	DP
UniProt Entry Name	DESP_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

