


Product datasheet

Anti-Desmoplakin I+II antibody ab118804

1 Image

Overview

<b>Product name</b>	Anti-Desmoplakin I+II antibody
<b>Description</b>	Rabbit polyclonal to Desmoplakin I+II
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IP <b>Unsuitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Rabbit, Chimpanzee, Rhesus monkey, Gorilla, Chinese hamster, Orangutan, Elephant 
<b>Immunogen</b>	Synthetic peptide corresponding to a region within amino acids 1900-1950 of Human Desmoplakin I+II (NP_004406.2).
<b>Positive control</b>	HeLa whole cell lysate.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.09% Sodium azide Constituent: 99% Tris citrate/phosphate  pH 7 to 8
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab118804 was affinity purified using an epitope specific to Desmoplakin I+II immobilized on solid support.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

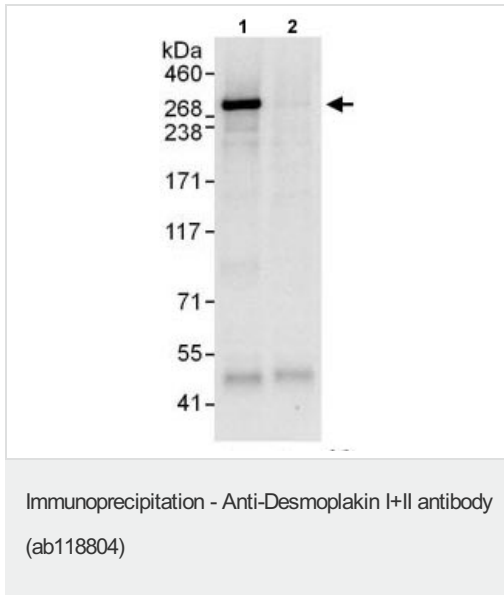
Applications

Our [Abpromise guarantee](#) covers the use of **ab118804** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at 2-10 µg/mg of lysate.
<b>Application notes</b>	Is unsuitable for WB.	
<b>Target</b>		
<b>Function</b>	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.	
<b>Tissue specificity</b>	Isoform DPI is apparently an obligate constituent of all desmosomes. Isoform DPII resides predominantly in tissues and cells of stratified origin.	
<b>Involvement in disease</b>	Keratoderma, palmoplantar, striate 2 Cardiomyopathy, dilated, with woolly hair and keratoderma Arrhythmogenic right ventricular dysplasia, familial, 8 Skin fragility-woolly hair syndrome Epidermolysis bullosa, lethal acantholytic Cardiomyopathy, dilated, with woolly hair, keratoderma, and tooth agenesis	
<b>Sequence similarities</b>	Belongs to the plakin or cytolinker family. Contains 17 plectin repeats. Contains 1 SH3 domain. Contains 6 spectrin repeats.	
<b>Domain</b>	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.	
<b>Post-translational modifications</b>	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. Substrate of transglutaminase. Some glutamines and lysines are cross-linked to other desmoplakin molecules, to other proteins such as keratin, envoplakin, periplakin and involucrin, and to lipids like omega-hydroxyceramide (PubMed:9651377).	
<b>Cellular localization</b>	Cell junction, desmosome. Cytoplasm, cytoskeleton. Cell membrane. 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).	

## Images



Detection of Desmoplakin I+II in Immunoprecipitates of HeLa whole cell lysates (1 mg for IP, 20% of IP loaded) using ab118804 at 6 µg/mg lysate for IP (Lane 1). For WB detection an anti-Desmoplakin I+II antibody which recognizes a downstream epitope was used at 1 µg/ml. Lane 2 represents control IgG IP. Detection: Chemiluminescence with an exposure time of 10 seconds.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors