

**DESCRIPTION**

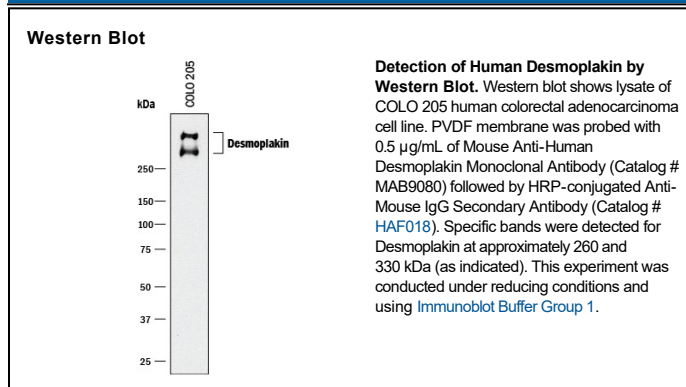
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Desmoplakin in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 824038
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Desmoplakin Asn1796-Val2046 Accession # P15924
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.5 µg/mL	See Below

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

DSP (desmoplakin) is the major high molecular weight protein of desmosomes, the most common type of intercellular junction in vertebrate epithelial cells. DSP is involved in the organization of the desmosomal cadherin-plakoglobin complex, as well as in the anchoring of intermediate filaments to desmosomes. These functions are thought to impart tensile strength and integrity to epithelial and vascular tissues. Mutations in DSP result in several clinical phenotypes, ranging from mild skin conditions, to severe skin blistering with subsequent dehydration, to lethal heart defects. Two major desmoplakin isoforms, DSP1 and DSP2, are encoded by alternative mRNA transcripts differentially spliced from the same gene. Human DSP1 is 2,871 amino acids (aa) in length, while DSP2 lacks part of a central alpha-helical rod domain, and is 599 aa shorter.