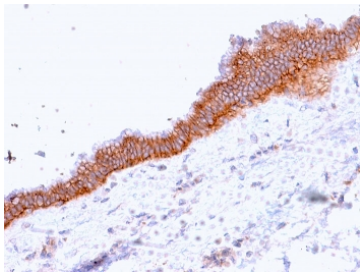
MRP3 Antibody Protein Microarray Validated / ABCC3 [clone ABCC3/2971] (V8183)

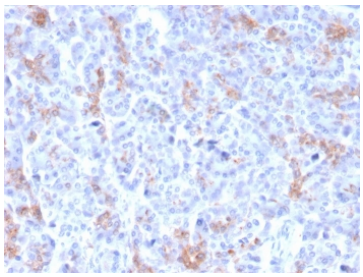
Catalog No.	Formulation	Size
V8183-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8183-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8183SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

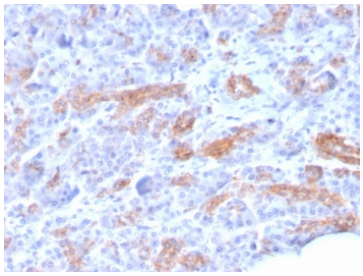
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ABCC3/2971
Purity	Protein G affinity chromatography
UniProt	O15438
Localization	Cell surface, cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This MRP3 antibody is available for research use only.



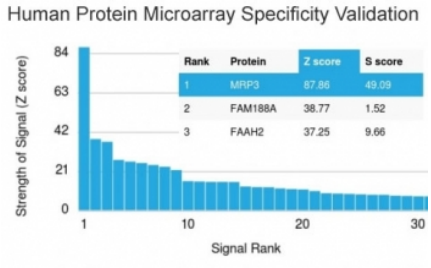
Immunohistochemistry analysis of MRP3 / ABCC3 antibody (clone ABCC3/2971) in human pancreatic carcinoma tissue. Formalin-fixed, paraffin-embedded tumor demonstrates strong membranous HRP-DAB brown staining in epithelial tumor cells, outlining cell borders consistent with plasma membrane localization of Multidrug resistance-associated protein 3. Stromal elements show minimal staining. Hematoxylin counterstain highlights tumor architecture and nuclei. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to staining.



IHC staining of FFPE human pancreatic carcinoma with MRP3 antibody (clone ABCC3/2971). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human pancreatic carcinoma with MRP3 antibody (clone ABCC3/2971). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using MRP3 antibody (clone ABCC3/2971). These results demonstrate the foremost specificity of the ABCC3/2971 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

MRP3 antibody recognizes Multidrug resistance-associated protein 3, a membrane transporter encoded by the ABCC3 gene. Also known as ABCC3 and ATP-binding cassette subfamily C member 3, MRP3 is a member of the ATP-binding cassette transporter family involved in the efflux of organic anions and conjugated metabolites. MRP3 antibody is widely used in research investigating xenobiotic transport, drug resistance mechanisms, and hepatic detoxification pathways.

MRP3 is a multi-pass transmembrane protein localized primarily to the basolateral membrane of hepatocytes and other epithelial cells. Structurally, ABCC3 contains two nucleotide-binding domains and multiple transmembrane domains characteristic of ABC transporters. The protein functions as an ATP-dependent efflux pump, transporting glucuronide, sulfate, and glutathione conjugates from cells into the bloodstream. In the liver, MRP3 plays a compensatory role when canalicular transporters are impaired, facilitating the export of bile acids and conjugated bilirubin into systemic circulation.

Altered ABCC3 expression has been reported in cholestatic liver disease, inflammatory conditions, and multiple cancers. Upregulation of MRP3 has been associated with chemotherapy resistance in certain tumor types, reflecting its ability to transport anticancer drugs and drug metabolites. Tissue distribution studies demonstrate expression in liver, intestine, pancreas, and kidney, with predominant membranous localization in epithelial cells. Clone ABCC3/2971 is a monoclonal antibody that has been evaluated by protein microarray analysis against thousands of full-length human proteins, supporting specificity for ABCC3 in research applications. This MRP3 antibody enables investigation of transporter biology, drug resistance pathways, and hepatobiliary function in experimental systems.

Application Notes

Optimal dilution of the MRP3 antibody should be determined by the researcher.

Immunogen

A recombinant human protein fragment (amino acids 815-957) was used as the immunogen for this MRP3 antibody.

Storage

Store the MRP3 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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