

## CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

<b>Product name</b>	SbmA, pAb	<b>Expiry date</b>	-
<b>Catalog number</b>	HP6001-20UG		
<b>Lot number</b>	-	<b>Amount</b>	20 µg
<b>Volume</b>	200 µl	<b>Concentration</b>	100 µg/ml
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN <sub>3</sub>	<b>Conjugate</b>	None
<b>Host species</b>	Rabbit IgG	<b>Purification</b>	Protein A
<b>Endotoxin</b>	N.A.		
<b>Storage</b>	4°C		

### Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #							1	1-3
Yes							•	•
No								
N.D.	•	•	•	•	•	•		

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- W: The band size to be expected is ~37 kDa under reducing conditions.
- Positive control: Recombinant SbmA or E.coli lysate.

### General Information

<b>Description</b>	This polyclonal antibody recognizes the inner membrane protein SbmA of Gram-negative bacteria. The SbmA protein is a homodimeric secondary transporter protein, that is involved in the transport of microcins B17 and J25, glycopeptide antibiotic bleomycin, proline-rich antimicrobial peptides of prokaryotic and eukaryotic origin, antisense peptide phosphodiamidate morpholino oligomers and peptide nucleic acids (PNA) into the E.coli cytoplasm. This protein is found in a large number of Gram-negative and also Gram-positive microorganisms, including plant and animal pathogens. The monomeric SbmA protein contains 406 amino acids (about 50 kDa) and has 8 transmembrane regions. The homodimeric complex present in the membrane closely resembles the membrane-spanning region of the ATP-binding cassette transporter family. Peptide transport mediated by SbmA is driven by an electrochemical gradient. SbmA-mediated internalization of peptide substrates suggest that the transport of an unknown substrate(s) represents the function of this protein.
<b>Immunogen</b>	Recombinant SbmA
<b>References</b>	<ol style="list-style-type: none"> <li>Ghosal, A et al; Role of SbmA in the uptake of peptide nucleic acid (PNA)-peptide conjugates in E. coli. ACS Chem Biol 2013, 8: 360</li> <li>Corbalan, N et al; Functional and structural study of the dimeric inner membrane protein SbmA. J Bacteriol 2013, 195: 5352</li> <li>Runti, G et al; Functional characterization of SbmA, a bacterial inner membrane transporter required for importing the antimicrobial peptide Bac7(1-35). J Bacteriol 2013, 195: 5343</li> </ol>
<b>Storage&amp;stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

**Precautions**

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

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We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC  
Brenda Teunissen

Date  
13/01/2021

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).