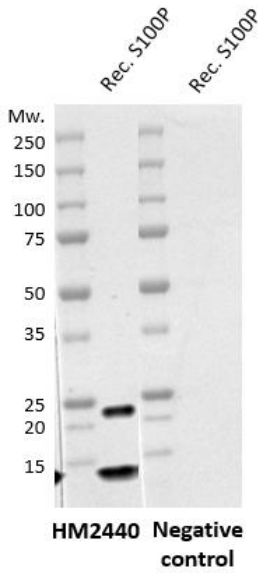
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	S100P, human, mAb, clone 4B12		
Catalog number	HM2440-100UG		
Lot number	-	**Expiry date**	-
Volume	1 ml	**Amount**	100 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	**Concentration**	1 mg/ml
Host Species	Mouse IgG1	**Conjugate**	None
Endotoxin	N/A	**Purification**	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #	1	1				1		1
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



W: Western blot analysis performed with human S100P protein with antibody 4B12 (HM2440) at 2 µg/ml .

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: A non-reduced sample treatment and SDS-Page were used. The band sizes are at 10 kDa and 20 kDa (Ref.1).

General Information

Description

The S100P monoclonal antibody (clone 4B12) is designed for precise detection of the S100P protein, a member of the S100 family of calcium-binding proteins involved in various cellular processes, including cell cycle regulation, growth, and motility. S100P is of significant interest in cancer research due to its strong association with tumor progression and metastasis in several malignancies, particularly in pancreatic, breast, lung, and ovarian cancers.

S100P's role in promoting tumor growth and enhancing cell motility makes it a valuable biomarker for investigating cancer pathology and potential therapeutic targets. The S100P clone 4B12 has been validated for use in immunohistochemistry (IHC), western blotting (WB), and enzyme-linked immunosorbent assays (ELISA) (1), offering

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researchers a reliable tool to study S100P expression patterns in both normal and tumor tissues. Its high specificity and sensitivity make it ideal for understanding the molecular mechanisms driving tumor aggressiveness and for exploring its potential role in cancer diagnostics and treatment development.
With S100P increasingly implicated in metastasis and as a regulator of immune responses, the clone 4B12 antibody is a critical reagent for cancer biology studies and can contribute to uncovering novel therapeutic strategies.

Immunogen	Human S100 calcium binding protein P
Aliases	S100E, MIG9
Gene	Gene name: S100P Entrez Gene ID 727 Uniprot P25815
Cross reactivity	Positive for Rat. Negative for Pig or Mouse
References	1. Dakhel, S. et al; S100P antibody-mediated therapy as a new promising strategy for the treatment of pancreatic cancer, , Oncogenesis, 2014, **3** e92, 1-10, PMCID: PMC4038391, DOI: 10.1038/oncsis.2014.7
Storage&stability	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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Approved by Manager of QC

Date

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