

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	S100A12, Human, clone 2		
Catalog number	HM2361-20UG		
Lot number	-	Expiry date	-
Volume	200 µl	Amount	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	Concentration	100 µg/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 #								
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: 0.25 µg recombinant S100A12 was loaded. The concentration of HM2361 was 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.

- IA: Antibody clone 2 can be used as capture and detection antibody.
- W: A reduced sample treatment and SDS-Page was used. The band size is ~11 kDa.

General Information

Description

The monoclonal antibody clone 2 recognizes S100 calcium-binding protein A12 (S100A12). The antibody does not cross-react with family members S100A7, S100A8 and S100A9, S100A8/A9 heterodimers and S100P. S100A12, also known as calgranulin C, is a member of the S100 protein family. To date, the family consists of 22 members. S100 proteins are low molecular weight calcium binding proteins. The proteins consist of 2 calcium binding EF-hands located on the termini flanked by hydrophobic hinge regions. Calcium ions acts as a global second messenger involved in the regulation of many aspects of cell function. S100 proteins are involved in sensing and transforming calcium signals to downstream cellular responses. S100 proteins are located in the cytoplasm and/or nucleus of a wide range of cell types and involved in the regulation of cellular processes such as cell cycle progression and differentiation and inflammatory responses. Several S100 members have been found to act as cytokines in inflammation, particularly in autoimmune skin conditions such as psoriasis. S100A12 is involved in calcium-dependent signal transduction pathways and has regulatory effects on cytoskeletal components thereby modulating neutrophil activities. Studies have shown that S100A12 might have potential as a biomarker for arthritis since their levels correlate with disease activity and are able to predict relapse and response to anti-inflammatory therapy. Unfortunately, studying the biology of S100A12 and other calgranulins is challenging due to its tendency to form complex homodimer, heterodimer and heterotetramers structures.

Immunogen

Recombinant S100A12.

Aliases	Protein S100-A12, CGRP, Calcium-binding protein in amniotic fluid 1, CAAF1, Calgranulin-C, CAGC, Extracellular newly identified RAGE-binding protein, EN-RAGE, Migration inhibitory factor-related protein 6, MRP-6, p6, Neutrophil S100 protein, S100 calcium-binding protein A12		
Gene	Gene name: S100A12	Entrez Gene ID: 6283	Uniprot: P80511
Cross reactivity	S100A8: No; S100A9: No; S100A8/A9: No; S100P: No		
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.		

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
28/12/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.