# abcam

## Product datasheet

## Anti-alpha 1 Spectrin antibody [EPR9300] - BSA and Azide free ab248875



## 3 Images

#### Overview

**Product name** Anti-alpha 1 Spectrin antibody [EPR9300] - BSA and Azide free

**Description** Rabbit monoclonal [EPR9300] to alpha 1 Spectrin - BSA and Azide free

**Host species** Rabbit

**Tested applications** Suitable for: Flow Cyt (Intra), WB

Unsuitable for: IHC-P or IP

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

**General notes** ab248875 is the carrier-free version of ab139403.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Affinity purified

Clonality Monoclonal

Clone number EPR9300

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab248875 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 280 kDa.

**Application notes** Is unsuitable for IHC-P or IP.

#### **Target**

**Function** Spectrin is the major constituent of the cytoskeletal network underlying the erythrocyte plasma

membrane. It associates with band 4.1 and actin to form the cytoskeletal superstructure of the

erythrocyte plasma membrane.

Involvement in disease Defects in SPTA1 are the cause of elliptocytosis type 2 (EL2) [MIM:130600]. EL2 is a Rhesus-

unlinked form of hereditary elliptocytosis, a genetically heterogeneous, autosomal dominant hematologic disorder. It is characterized by variable hemolytic anemia and elliptical or oval red

cell shape.

Defects in SPTA1 are a cause of hereditary pyropoikilocytosis (HPP) [MIM:266140]. HPP is an

autosomal recessive disorder characterized by hemolytic anemia, microspherocytosis,

poikilocytosis, and an unusual thermal sensitivity of red cells.

Defects in SPTA1 are the cause of spherocytosis type 3 (SPH3) [MIM:270970]; also known as hereditary spherocytosis type 3 (HS3). Spherocytosis is a hematologic disorder leading to chronic hemolytic anemia and characterized by numerous abnormally shaped erythrocytes which are generally spheroidal. SPH3 is characterized by severe hemolytic anemia. Inheritance is

autosomal recessive.

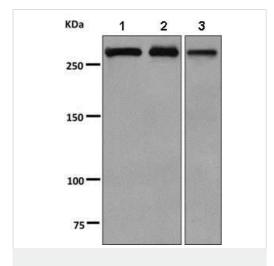
**Sequence similarities** Belongs to the spectrin family.

Contains 3 EF-hand domains.

Contains 1 SH3 domain.

Contains 21 spectrin repeats.

#### **Images**



Western blot - Anti-alpha 1 Spectrin antibody [EPR9300] - BSA and Azide free (ab248875) **All lanes :** Anti-alpha 1 Spectrin antibody [EPR9300] (<u>ab139403</u>) at 1/1000 dilution

Lane 1: K562 lysate

Lane 2: Human fetal heart lysate

Lane 3: Human fetal liver lysate

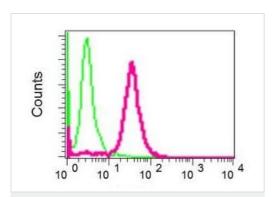
Lysates/proteins at 10 µg per lane.

## Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 280 kDa

This data was developed using <u>ab139403</u>, the same antibody clone in a different buffer formulation.



Flow Cytometry (Intracellular) - Anti-alpha 1 Spectrin antibody [EPR9300] - BSA and Azide free (ab248875) This data was developed using <u>ab139403</u>, the same antibody clone in a different buffer formulation.

Intracellular flow cytometric analysis of permeabilized K562 cells labelling alpha 1 Spectrin with <u>ab139403</u> at 1/100 dilution (red) or a rabbit lgG (negative) (green).



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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