# SPTA1 monoclonal antibody, clone AF10

Catalog # MAB2515 Size 100 ug

## Specification

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| **Product Description** | Mouse monoclonal antibody raised against native SPTA1. |
| **Immunogen** | Native purified human SPTA1. |
| **Host** | Mouse |
| **Reactivity** | Human |
| **Specificity** | This antibody is specific to the 240kD erythroid alpha-spectrin. Erythroid spectrins, some other proteins of erythroid cytoskeleton, and the transmembrane protein band 3 are highly specific to erythrocytes and their progenitors. They are more reliable markers for erythroid differentiation than Glycophorin A, the commonly used marker for erythroid differentiation, because Glycophorin A is expressed also in many cell lines otherwise exhibiting mainly megakaryotic charasteristics. Monoclonal antibody to erythroid alpha-spectrin is derived from the hybridoma produced by fusion between myeloma cells and Balb/c spleen cells. |
| **Form** | Liquid |
| **Isotype** | IgG1 |
| **Quality Control Testing** | Antibody Reactive Against Native Purified Protein. |
| **Recommend Usage** | Western Blot (1:1000)<br>The optimal working dilution should be determined by the end user. |
| **Storage Buffer** | In PBS (1% BSA, 0.09% sodium azide) |
| **Storage Instruction** | Store at 4°C. Do not freeze. |
| **Note** | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |

## Applications

- Western Blot

- Immunohistochemistry (Frozen sections)
- Immunocytochemistry
- Immunoprecipitation

## Gene Info — SPTA1

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| **Entrez GeneID** | 6708 |
| **Gene Name** | SPTA1 |
| **Gene Alias** | EL2, SPTA |
| **Gene Description** | spectrin, alpha, erythrocytic 1 (elliptocytosis 2) |
| **Omim ID** | 130600 182860 266140 270970 |
| **Gene Ontology** | Hyperlink |
| **Gene Summary** | Spectrin is an actin crosslinking and molecular scaffold protein that links the plasma membrane to the actin cytoskeleton, and functions in the determination of cell shape, arrangement of transmem brane proteins, and organization of organelles. It is a tetramer made up of alpha-beta dimers linke d in a head-to-head arrangement. This gene is one member of a family of alpha-spectrin genes. T he encoded protein is primarily composed of 22 spectrin repeats which are involved in dimer for mation. It forms weaker tetramer interactions than non-erythrocytic alpha spectrin, which may incre ase the plasma membrane elasticity and deformability of red blood cells. Mutations in this gene re sult in a variety of hereditary red blood cell disorders, including elliptocytosis type 2, pyropoikilocyt osis, and spherocytic hemolytic anemia. [provided by RefSeq |
| **Other Designations** | OTTHUMP00000021115\|alpha-I spectrin\|erythrocyte alpha-spectrin\|erythroid alpha-spectrin\|spect rin alpha chain, erythrocyte\|spectrin, alpha, erythrocytic 1 |

## Publication Reference

- Expression of megakaryocytic and erythroid properties in human leukemic cells.

  Tani T, Ylänne J, Virtanen I.

  Exp Hematol 1996 Feb; 24(2):158.

## Disease

- Hypertension
- Tobacco Use Disorder