

## S100A5 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant S100A5. Catalog # AT3758a

#### Specification

## S100A5 Antibody (monoclonal) (M03) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC, E <u>P33763</u> <u>NM\_002962</u> Human mouse Monoclonal IgG2a Kappa 10744

### S100A5 Antibody (monoclonal) (M03) - Additional Information

Gene ID 6276

Other Names Protein S100-A5, Protein S-100D, S100 calcium-binding protein A5, S100A5, S100D

**Target/Specificity** S100A5 (NP\_002953, 1 a.a. ~ 90 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000

Format Clear, colorless solution in phosphate buffered saline, pH 7.2.

**Storage** Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions** S100A5 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

### S100A5 Antibody (monoclonal) (M03) - Protocols

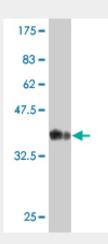
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

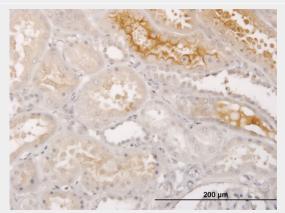


- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

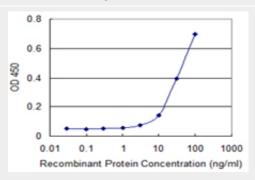
## S100A5 Antibody (monoclonal) (M03) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (35.64 KDa).



Immunoperoxidase of monoclonal antibody to S100A5 on formalin-fixed paraffin-embedded human kidney. [antibody concentration 1.5 ug/ml]



Detection limit for recombinant GST tagged S100A5 is 3 ng/ml as a capture antibody.

# S100A5 Antibody (monoclonal) (M03) - Background

The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range



of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. This protein has a Ca2+ affinity 20- to 100-fold higher than the other S100 proteins studied under identical conditions. This protein also binds Zn2+ and Cu2+, and Cu2+ strongly which impairs the binding of Ca2+. This protein is expressed in very restricted regions of the adult brain.

## S100A5 Antibody (monoclonal) (M03) - References

Hippocampal atrophy as a quantitative trait in a genome-wide association study identifying novel susceptibility genes for Alzheimer's disease. Potkin SG, et al. PLoS One, 2009 Aug 7. PMID 19668339. Variation in genes of the epidermal differentiation complex in German atopic dermatitis patients. Stemmler S, et al. Int J Immunogenet, 2009 Aug. PMID 19601998. Solution structure and dynamics of S100A5 in the apo and Ca2+-bound states. Bertini I, et al. J Biol Inorg Chem, 2009 Sep. PMID 19536568. The DNA sequence and biological annotation of human chromosome 1. Gregory SG, et al. Nature, 2006 May 18. PMID 16710414. Differential expression of S100 proteins in the developing human hippocampus and temporal cortex. Chan WY, et al. Microsc Res Tech, 2003 Apr 15. PMID 12645008.