

**SIM2 Antibody (monoclonal) (M01)****Mouse monoclonal antibody raised against a partial recombinant SIM2.****Catalog # AT3888a****Specification**

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**SIM2 Antibody (monoclonal) (M01) - Product Information**

|                   |                           |
|-------------------|---------------------------|
| Application       | WB, E                     |
| Primary Accession | <a href="#">Q14190</a>    |
| Other Accession   | <a href="#">NM_005069</a> |
| Reactivity        | Human                     |
| Host              | mouse                     |
| Clonality         | Monoclonal                |
| Isotype           | IgG2a Kappa               |
| Calculated MW     | 73219                     |

**SIM2 Antibody (monoclonal) (M01) - Additional Information****Gene ID** 6493**Other Names**

Single-minded homolog 2, Class E basic helix-loop-helix protein 15, bHLHe15, SIM2, BHLHE15

**Target/Specificity**

SIM2 (NP\_005060, 426 a.a. ~ 526 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution**

WB~~1:500~1000

E~~N/A

**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**

SIM2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

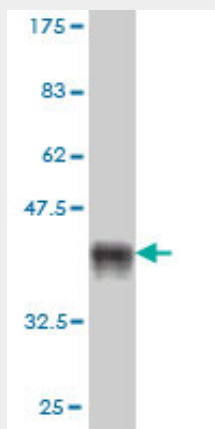
**SIM2 Antibody (monoclonal) (M01) - Protocols**

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

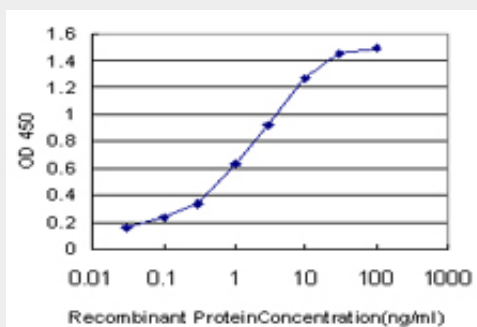
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **SIM2 Antibody (monoclonal) (M01) - Images**



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.11 kDa) .



Detection limit for recombinant GST tagged SIM2 is approximately 0.03ng/ml as a capture antibody.

### **SIM2 Antibody (monoclonal) (M01) - Background**

SIM1 and SIM2 genes are Drosophila single-minded (sim) gene homologs. The Drosophila sim gene encodes a transcription factor that is a master regulator of fruit fly neurogenesis. SIM2 maps within the so-called Down syndrome chromosomal region. Based on the mapping position, its potential function as transcriptional repressor and similarity to Drosophila sim, it is proposed that SIM2 may contribute to some specific Down syndrome phenotypes

### **SIM2 Antibody (monoclonal) (M01) - References**

[Association study of SIM2 gene polymorphisms with susceptibility to congenital scoliosis in a Chinese Han population] Fei Q, et al. Zhonghua Yi Xue Za Zhi, 2009 Nov 10. PMID 20137643. Identification of the transcription factor single-minded homologue 2 as a potential biomarker and immunotherapy target in prostate cancer. Arredouani MS, et al. Clin Cancer Res, 2009 Sep 15. PMID 19737960. The HIF1alpha-inducible pro-cell death gene BNIP3 is a novel target of SIM2s repression through cross-talk on the hypoxia response element. Farrall AL, et al. Oncogene, 2009 Oct 15. PMID 19668230. Ha-Ras transformation of MCF10A cells leads to repression of Single-minded-2s through NOTCH and C/EBPbeta. Gustafson TL, et al. Oncogene, 2009 Mar 26.

PMID 19169276. Loss of single-minded-2s in the mouse mammary gland induces an epithelial-mesenchymal transition associated with up-regulation of slug and matrix metalloprotease 2. Laffin B, et al. Mol Cell Biol, 2008 Mar. PMID 18160708.