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SIM2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant SIM2.
Catalog # AT3888a

Product Information

Application	WB, E
Primary Accession	Q14190
Other Accession	NM_005069
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3E7
Calculated MW	73219

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.

Background

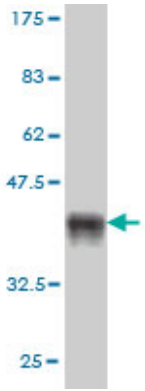
SIM1 and SIM2 genes are Drosophila single-minded (sim) gene homologs. The Drosophila sim gene encodes a transcription factor that is a master regulator of fruit fly neurogenesis. SIM2 maps within the so-called Down syndrome chromosomal region. Based on the mapping position, its potential function as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

References

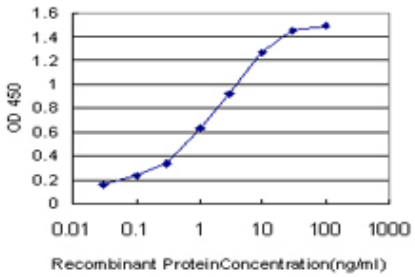
[Association study of SIM2 gene polymorphisms with susceptibility to congenital scoliosis in a Chinese Han

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 Singleminded-2s through NOTCH and C/EBPbeta. Gustafson TL, et al. Oncogene, 2009 Mar 26. PMID 19169276.Loss of singleminded-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.

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.