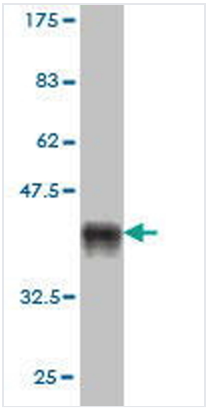
SIM2 Antibody – Mouse Monoclonal

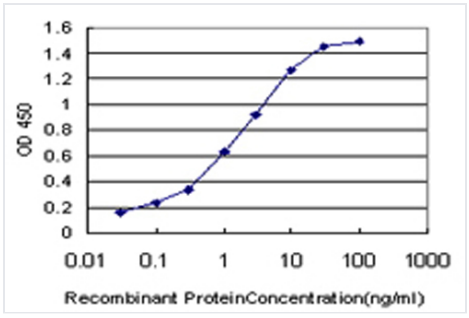
PRODUCT OVERVIEW

Product Name	SIM2, Monoclonal Antibody
Full Product Name	SIM2 (Single-minded Homolog 2, Class E Basic Helix-loop-helix Protein 15, bHLHe15, BHLHE15, MGC119447) (PE)
Product Gene Name	anti-SIM2 antibody
Clonality	Monoclonal
Isotype	IgG2a,k
Clone Number	3E6
Host	Mouse
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with R-Phycoerythrin (PE).
Purity/Purification	Purified by Protein A Affinity Chromatography.
Specificity	Recognizes human SIM2.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: PE conjugates are sensitive to light. For maximum recover of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	73kDa
OMIM	600892
3D Structure	ModBase 3D Structure for Q14190
Immunogen	Partial recombinant corresponding to aa426-526 from human SIM2 (NP_005060) with GST tag. MW of the GST tag alone is 26kD.
Immunogen Sequence	ESSDLLYTPSYSLPFSYHYGHFPLDSHVFSSKKPMLPAKFGQPQGSPCEVARFFLSTLPASGECQWHYANPLVPSSSSPAKNPPEPPANTARHSLVPSY
Conjugate	PE
Product Categories/Family for anti-SIM2 antibody	Antibodies; Transcription Factors
Applications Tested/Suitable for anti-SIM2 antibody	ELISA (EIA), Western Blot (WB)
Application Notes for anti-SIM2 antibody	Applications are based on unconjugated antibody.
Related Product Information for anti-SIM2 antibody	Single-minded homolog 2 is a transcription factor that may be a master gene of CNS development in cooperation with Arnt. It may have pleiotropic effects in the tisues expressed during development. Efficient DNA binding requires dimerisation with another bHLH protein. It forms a heterodimer with ARNT.

Other Notes	Small volumes of anti-SIM2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for SIM2 purchase	MBS6160271 is an antibody targeting SIM2. Also known as SIM2 (Single-minded Homolog 2, Class E Basic Helix-loop-helix Protein 15, bHLHe15, BHLHE15, MGC119447) (PE). Reactive in Human. Host: Mouse.



Western Blot (WB) of anti-SIM2 antibody
Western Blot detection against Immunogen (37.11kD).



Testing Data of anti-SIM2 antibody
Detection limit for recombinant GST tagged SIM2 is ~0.03ng/ml as a capture antibody.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SIM2. It may not necessarily be applicable to this product.

NCBI GI #	2851630
NCBI GeneID	6493
NCBI Accession #	NP_005060
UniProt Primary Accession #	Q14190
UniProt Related Accession #	Q14190
GenBank Nucleotide #	NM_005069
NCBI Official Full Name	Single-minded homolog 2
NCBI Official Synonym Full Names	SIM bHLH transcription factor 2
NCBI Official Symbol	SIM2
NCBI Official Synonym Symbols	SIM; bHLHe15; HMC13F06; HMC29C01
UniProt Protein Name	Single-minded homolog 2
UniProt Synonym Protein Names	Class E basic helix-loop-helix protein 15; bHLHe15
Protein Family	Single-minded
UniProt Gene Name	SIM2
UniProt Synonym Gene Names	BHLHE15; bHLHe15
UniProt Entry Name	SIM2_HUMAN
NCBI Protein Information	single-minded homolog 2
NCBI Summary for SIM2	This gene represents a homolog of the Drosophila single-minded (sim) gene, which encodes a transcription factor that is a master regulator of neurogenesis. The encoded protein is ubiquitinated by RING-IBR-RING-type E3 ubiquitin ligases, including the parkin RBR E3 ubiquitin protein ligase. This gene maps within the so-called Down syndrome chromosomal region, and is thus thought to contribute to some specific Down syndrome phenotypes. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Sep 2014]

UniProt Comments for SIM2	SIM2: Transcription factor that may be a master gene of CNS development in cooperation with Arnt. It may have pleiotropic effects in the tissues expressed during development. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Motility/polarity/chemotaxis; DNA-binding Chromosomal Location of Human Ortholog: 21q22.13 Cellular Component: nucleoplasm Molecular Function: signal transducer activity; DNA binding; protein heterodimerization activity; transcription factor activity Biological Process: nervous system development; transcription, DNA-dependent; negative regulation of transcription from RNA polymerase II promoter; embryonic pattern specification; cell differentiation; signal transduction; lung development
Research Articles on SIM2	**1.** TMEM75 functions as an oncogene relying on activation of SIM2 in colorectal cancer.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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Online datasheet: https://www.mybiosource.com/monoclonal-human-antibody/sim2/6160271