SIM1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12960A

Product Information

Application	IHC-P-Leica, WB, E
Primary Accession	P81133
Other Accession	P05709, Q61045, NP_005059.2
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Drosophila
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32160
Calculated MW	85515
Antigen Region	1-30

Additional Information

Gene ID	6492
Other Names	Single-minded homolog 1, Class E basic helix-loop-helix protein 14, bHLHe14, SIM1, BHLHE14
Target/Specificity	This SIM1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human SIM1.
Dilution	IHC-P-Leica~~1:250 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SIM1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SIM1
Synonyms	BHLHE14

Function	Transcriptional factor that may have pleiotropic effects during embryogenesis and in the adult.
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00632, ECO:0000255|PROSITE-ProRule:PRU00981}

Background

SIM1 and SIM2 genes are Drosophila single-minded (sim) gene homologs. SIM1 transcript was detected only in fetal kidney out of various adult and fetal tissues tested. Since the sim gene plays an important role in Drosophila development and has peak levels of expression during the period of neurogenesis,it was proposed that the human SIM gene is a candidate for involvement in certain dysmorphic features (particularly the facial and skull characteristics), abnormalities of brain development, and/or mental retardation of Down syndrome.
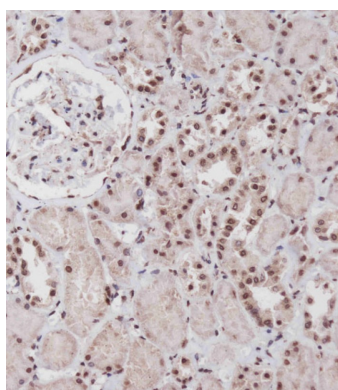
References

Ghoussaini, M., et al. Obesity (Silver Spring) 18(8):1670-1675(2010)
Tolson, K.P., et al. J. Neurosci. 30(10):3803-3812(2010)
Traurig, M., et al. Diabetes 58(7):1682-1689(2009)
Gregorio, S.P., et al. Psychiatry Res 165 (1-2), 1-9 (2009) :
Hung, C.C., et al. Int J Obes (Lond) 31(3):429-434(2007)

Images

Immunohistochemical analysis of AP12960a on paraffin-embedded Human kidney tissue was performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:250) for 15min at room temperature. Leica Bond Polymer Refine Detection was used as the secondary antibody.
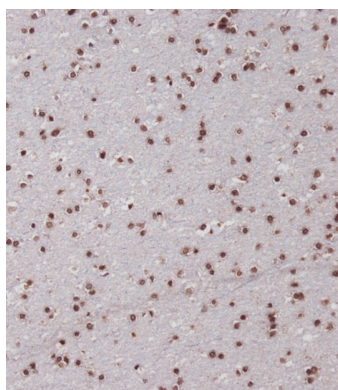
Immunohistochemical analysis of AP12960a on paraffin-embedded Human brain tissue was performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:250) for 15min at room temperature. Leica Bond Polymer Refine Detection was used as the secondary antibody.

Anti-SIM1 Antibody (N-term) at 1:2000 dilution + A549 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 86 kDa Blocking/Dilution buffer: 5% NFDM/TBST.
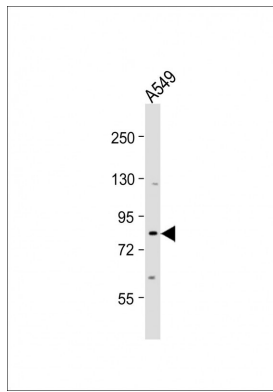
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