

**SIM1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12960A****Specification**

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**SIM1 Antibody (N-term) - Product Information**

Application	IHC-P-Leica, WB,E
Primary Accession	<a href="#">P81133</a>
Other Accession	<a href="#">P05709</a> , <a href="#">Q61045</a> , <a href="#">NP_005059.2</a> , <a href="#">F1QMF7</a>
Reactivity	Human
Predicted	Zebrafish, Mouse, Drosophila
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1-30

**SIM1 Antibody (N-term) - 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~~1:2000

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.

**SIM1 Antibody (N-term) - Protein Information****Name** SIM1

**Synonyms** BHLHE14

**Function** Transcriptional factor that may have pleiotropic effects during embryogenesis and in the adult.

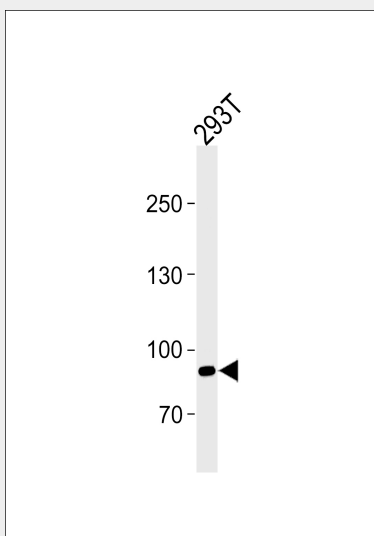
**Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00632, ECO:0000255|PROSITE-ProRule:PRU00981}

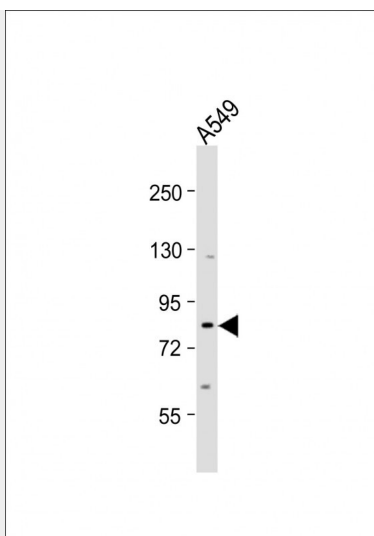
**SIM1 Antibody (N-term) - Protocols**

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

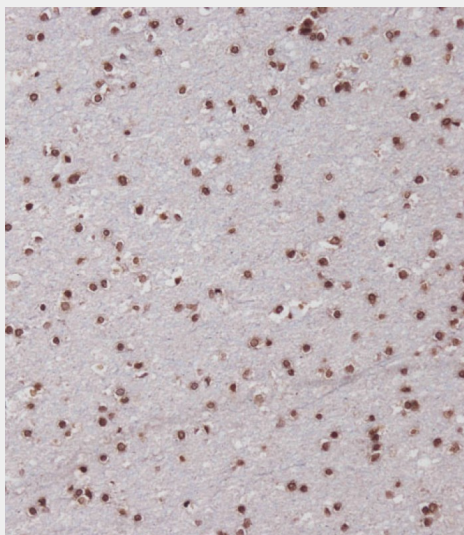
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**SIM1 Antibody (N-term) - Images**

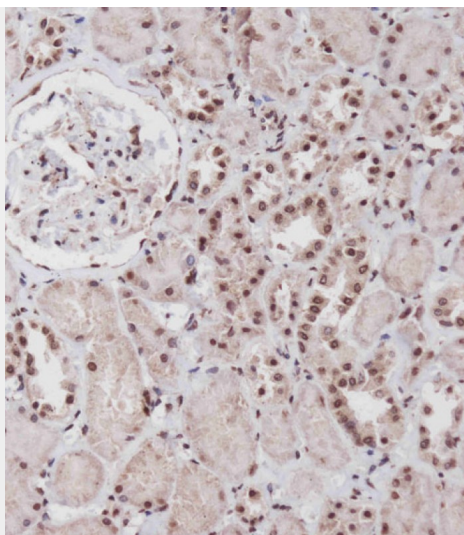
Western blot analysis of lysate from 293T cell line, using SIM1 Antibody (N-term) (Cat. #AP12960a). AP12960a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.



Anti-SIM1 Antibody (N-term) at 1:2000 dilution + A549 whole cell lysate Lysates/proteins at 20  $\mu$ g 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.



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.



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.

#### **SIM1 Antibody (N-term) - 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.

#### **SIM1 Antibody (N-term) - 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)