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Datasheet for ABIN1394279

## anti-SIM2 antibody (AA 321-430) (Alexa Fluor 555)

### Overview

Quantity:	100 µL
Target:	SIM2
Binding Specificity:	AA 321-430
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SIM2 antibody is conjugated to Alexa Fluor 555
Application:	Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p))

### Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human SIM2
Isotype:	IgG
Predicted Reactivity:	Human, Mouse, Rat, Dog, Cow, Sheep, Pig, Horse
Purification:	Purified by Protein A.

### Target Details

Target:	SIM2
Alternative Name:	SIM2 ( <a href="#">SIM2 Products</a> )
Background:	Synonyms: bHLHe15, Class E basic helix loop helix protein 15, Class E basic helix-loop-helix

## Target Details

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protein 15, MGC119447, SIM 2, SIM, Sim2, SIM2\_HUMAN, Single minded homolog 2 Drosophila, Single minded homolog 2, Single-minded homolog 2, Transcription factor SIM2.

Background: The Per-Arnt-Sim (PAS) domain was identified as a 270 amino acid motif that mediates associations between various PAS family transcription factors. Several PAS domain family members have been identified including AhR, Arnt 1, and single-minded proteins (SIM1 and SIM2). The aromatic (aryl) hydrocarbon receptor, AhR, is a ligand dependent transcription factor that interacts with specific DNA sequences termed xenobiotic responsive elements (XREs) to activate several genes including CYP1A1, glutathione S-transferase Ya subunit and DT-diaphorase. The Ah receptor nuclear translocator protein 1 (Arnt 1) is required for ligand-dependent nuclear translocation of the Ah receptor and is also necessary for Ah receptor binding to the XRE element. Both SIM1 and SIM2 inhibit AhR/Arnt dimerization, thus inhibiting transcriptional activation. The SIM genes are thought to be involved in the directing and regionalization of tissues during development and the SIM2 gene, which is located on chromosome 21, is a candidate for the gene responsible for Down syndrome.

## Application Details

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Application Notes: IF(IHC-P) 1:50-200  
IF(IHC-F) 1:50-200  
IF(ICC) 1:50-200

Restrictions: For Research Use only

## Handling

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Format: Liquid

Concentration: 1 µg/µL

Buffer: Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.

Expiry Date: 12 months