

# Rabbit Anti-FIH1/HIF1AN antibody

## SL4201R

Product Name:	FIH1/HIF1AN
Chinese Name:	缺氧诱导因子1α抑制蛋白/HIF1AN抗体
Alias:	Hypoxia inducible factor asparagine hydroxylase; Factor inhibiting HIF1; FIH 1; FIH-1; FIH1; Hypoxia inducible factor 1 alpha inhibitor; Hypoxia inducible factor 1 alpha subunit inhibitor; Peptide aspartate beta dioxygenase; HIF1AN; DKFZp762F1811; FIH1; HIF1AN; FLJ20615; FLJ22027; HIF1N_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	38kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FIH1/HIF1AN:251-349/349
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	HIF1AN (Hypoxia inducible factor 1 alpha inhibitor) is a corepressor that interacts with hypoxia inducible factor 1 (HIF1) alpha and the von Hippel Lindau tumor suppressor protein to mediate repression of HIF1 transcriptional activity.

#### Function:

Hydroxylates HIF-1 alpha at 'Asp-803' in the C-terminaltransactivation domain (CAD). Functions as an oxygen sensor and,under normoxic conditions, the hydroxylation prevents interaction of HIF-1 with transcriptional coactivators includingCbp/p300-interacting transactivator. Involved in transcriptionalrepression through interaction with HIF1A, VHL and histonedeacetylases. Hydroxylates specific Asn residues within ankyrinrepeat domains (ARD) of NFKB1, NFKBIA, NOTCH1, ASB4, PPP1R12A andseveral other ARD-containing proteins. Also hydroxylates Asp andHis residues within ARDs of ANK1 and TNKS2, respectively.Negatively regulates NOTCH1 activity, accelerating myogenic differentiation. Positively regulates ASB4 activity, promotingvascular differentiation.

#### Subunit:

Homodimer; homodimerization is essential for catalyticactivity. Interacts with VHL and HIF1A. Part of a complex with VHL,HIF1A and HDAC1 or HDAC2 or HDAC3. Interacts with NFKB1 and NFKBIA.Interacts with NOTCH1, NOTCH2 and NOTCH3 but not with NOTCH4.Interacts with APBA3; binding inhibits HIF1AN binding to HIF1A.Interacts with TNKS2. Interacts with PPP1R12A. Interacts with ASB4(By similarity). Interacts with UBE3A.

## **Subcellular Location:**

Nucleus. Cytoplasm. Cytoplasm, perinuclearregion. Note=Mainly cytoplasmic localization, but interaction with NOTCH1 results in nuclear localization and interaction with ABPA3results in perinuclear localization in macrophages.

#### Similarity:

Contains 1 JmjC domain.

**SWISS:** 

O5W147

Gene ID:

55662

### Database links:

Clone ID: BC007719 Human

Entrez Gene: 55662 Human

IMAGE Id: 4138066 Human

Omim: 606615 Human

SwissProt: O5W147 Human

SwissProt: Q9NWT6 Human

Unigene: 500788 Human

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

