

HIF1AN Antibody (C-term)
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8627b

Specification

HIF1AN Antibody (C-term) - Product Information

Application	WB, IF,E
Primary Accession	Q9NWT6
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Calculated MW	40285

HIF1AN Antibody (C-term) - Additional Information

Gene ID 55662

Other Names

Hypoxia-inducible factor 1-alpha inhibitor, 1.14.11.30, 1.14.11.n4, Factor inhibiting HIF-1, FIH-1, Hypoxia-inducible factor asparagine hydroxylase, HIF1AN, FIH1

Target/Specificity

This HIF1AN antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between 1-349 amino acids from human HIF1AN.

Dilution

WB~~1:4000

IF~~1:25

E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

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

HIF1AN Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HIF1AN Antibody (C-term) - Protein Information

Name HIF1AN

Synonyms FIH1

Function Hydroxylates HIF-1 alpha at 'Asn-803' in the C-terminal transactivation domain (CAD). Functions as an oxygen sensor and, under normoxic conditions, the hydroxylation prevents interaction of HIF-1 with transcriptional coactivators including Cbp/p300-interacting transactivator. Involved in transcriptional repression through interaction with HIF1A, VHL and histone deacetylases. Hydroxylates specific Asn residues within ankyrin repeat domains (ARD) of NFKB1, NFKBIA, NOTCH1, ASB4, PPP1R12A and several other ARD-containing proteins. Also hydroxylates Asp and His residues within ARDs of ANK1 and TNKS2, respectively. Negatively regulates NOTCH1 activity, accelerating myogenic differentiation. Positively regulates ASB4 activity, promoting vascular differentiation.

Cellular Location

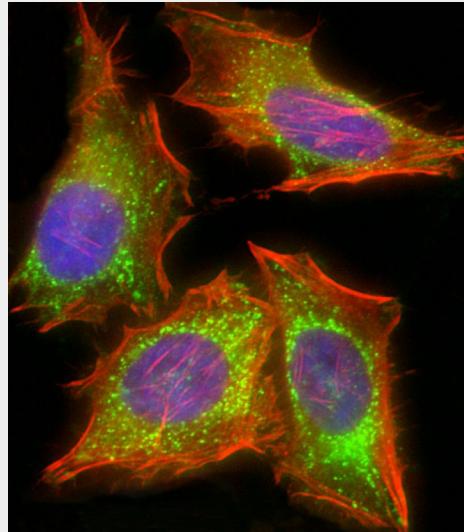
Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Note=Mainly cytoplasmic localization, but interaction with NOTCH1 results in nuclear localization and interaction with ABPA3 results in perinuclear localization in macrophages

HIF1AN Antibody (C-term) - Protocols

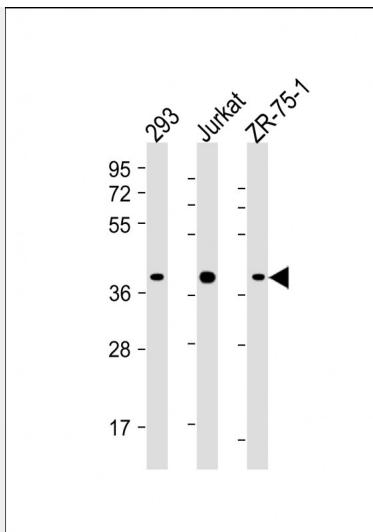
Provided below are standard protocols that you may find useful for product applications.

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

HIF1AN Antibody (C-term) - Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling HIF1AN with AM8627b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-mouse IgG (NH174309) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing mitochondrion staining on HeLa cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (OI17558410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).



All lanes : Anti-HIF1AN Antibody (C-term) at 1:4000 dilution Lane 1: 293 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: ZR-75-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

HIF1AN Antibody (C-term) - Background

Hydroxylates HIF-1 alpha at 'Asp-803' in the C-terminal transactivation domain (CAD). Functions as an oxygen sensor and, under normoxic conditions, the hydroxylation prevents interaction of HIF-1 with transcriptional coactivators including Cbp/p300- interacting transactivator. Involved in transcriptional repression through interaction with HIF1A, VHL and histone deacetylases. Hydroxylates specific Asn residues within ankyrin repeat domains (ARD) of NFKB1, NFKBIA, NOTCH1, ASB4, PPP1R12A and several other ARD-containing proteins. Also hydroxylates Asp and His residues within ARDs of ANK1 and TNKS2, respectively. Negatively regulates NOTCH1 activity, accelerating myogenic differentiation. Positively regulates ASB4 activity, promoting vascular differentiation.

HIF1AN Antibody (C-term) - References

- Mahon P.C., et al. Genes Dev. 15:2675-2686(2001).
- Ota T., et al. Nat. Genet. 36:40-45(2004).
- Deloukas P., et al. Nature 429:375-381(2004).
- Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
- Bechtel S., et al. BMC Genomics 8:399-399(2007).