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KD-Validated Anti-HIF1AN Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1564

Specification

KD-Validated Anti-HIF1AN Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q9NWT6
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 40 kDa , observed , 40 kDa KDa**
Gene Name	**HIF1AN**
Aliases	**HIF1AN; Hypoxia Inducible Factor 1 Subunit Alpha Inhibitor; FIH1; Hypoxia-Inducible Factor Asparagine Hydroxylase; Hypoxia-Inducible Factor 1-Alpha Inhibitor; Peptide-Aspartate Beta-Dioxygenase; Factor Inhibiting HIF-1; FLJ20615; FLJ22027; FIH-1; Hypoxia Inducible Factor 1 Alpha Subunit Inhibitor; Factor Inhibiting HIF1; DKFZp762F1811; DKFZP762F1811; EC 1.14.11.30; EC 1.14.11.N4**
Immunogen	**A synthesized peptide derived from human HIF1AN**

KD-Validated Anti-HIF1AN Rabbit Monoclonal Antibody - 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

KD-Validated Anti-HIF1AN Rabbit Monoclonal Antibody - 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.

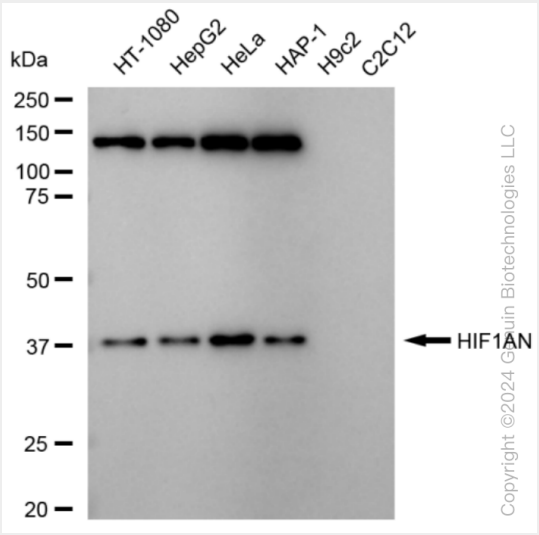
Cellular Location
Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Note=Mainly cytoplasmic localization, but interaction with NOTCH1 results in nuclear localization and interaction with ABPA3 results in perinuclear localization in macrophages

KD-Validated Anti-HIF1AN Rabbit Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-HIF1AN Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-HIF1AN antibody (Cat#AGI1564). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-HIF1AN antibody (Cat#AGI1564, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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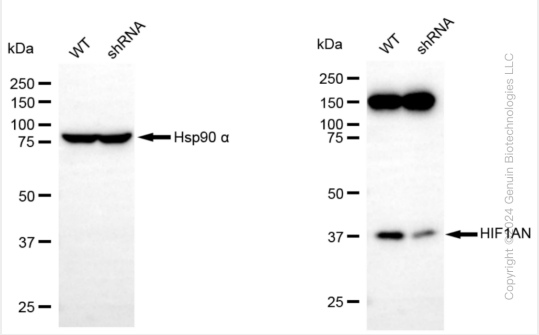
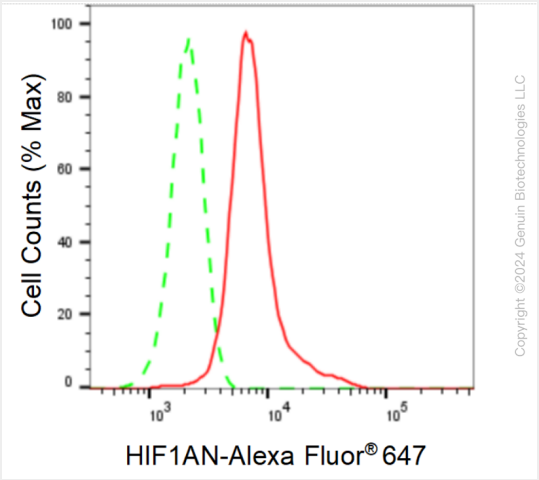
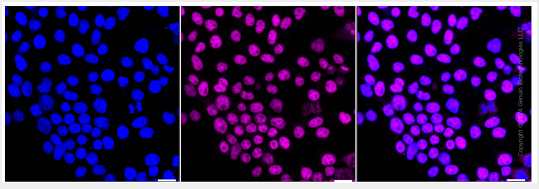


Western blotting analysis using anti-HIF1AN antibody (Cat#AGI1564). HIF1AN expression in wild type (WT) and HIF1AN shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-HIF1AN antibody (Cat#AGI1564, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of HIF1AN expression in HeLa cells using HIF1AN antibody (Cat#AGI1564, 1:2,000). GrHIF1ANotype control; red, HIF1AN.



Immunocytochemical staining of HeLa cells with anti-HIF1AN antibody (Cat#AGI1564, 1:1,000). Nuclei were stained blue with DAPI; HIF1AN was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.