



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Recombinant Human Hypoxia-Inducible Factor-1 alpha Inhibitor

Catalog No.
228-10708

Source:
E. Coli

Synonyms:

FIH1, FIH-1, HIF1AN, Factor Inhibiting HIF1A, Hypoxia-inducible factor 1-alpha inhibitor, Hypoxia-inducible factor asparagine hydroxylase, Factor inhibiting HIF-1, FLJ20615, FLJ22027, DKFZp762F1811.

Introduction:

Overexpression of the HIF1AN is linked with tumor aggressiveness in pancreatic endocrine tumors. HIF1AN hydroxylates Notch ICD at two residues that are crucial for the function of Notch ICD as a transactivator within cells and during neurogenesis and myogenesis. HIF1AN is commonly expressed in invasive breast carcinoma. The hypoxic response and survival recommends that tumour regulation of HIF1AN is an additional important mechanism for HIF pathway activation. HIF1AN is an asparaginyl hydroxylase enzyme that controls the transcriptional activity of hypoxia-inducible factor. FIH1 is a part of the Fe²⁺ and 2-oxoglutarate-dependent dioxygenase superfamily, FIH1 is protein that hydroxylates a specific asparagine residue (Asn-803) within the HIF1A C-terminal transactivation domain. In normoxia, the HIF1AN-mediated hydroxylation of the HIF1? transactivation domain which results in blockage of the HIF1A-p300/CBP interaction and represses transcriptional activity of HIF1A targeted genes.

Description:

HIF1AN Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 349 amino acids and having a molecular mass of 40.2 kDa.
The HIF1AN is purified by proprietary chromatographic techniques.

Physical Appearance:

Sterile Filtered colorless solution.

Formulation:

The protein solution contains 20mM Tris-HCl pH-8.

Purity

Greater than 90% as determined by SDS-PAGE.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Stability:

HIF1AN although stable 4°C for 4 weeks, should be stored desiccated below -18°C.
For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Amino Acid Sequence

MAATAAEAVA	SGSGEPREEA	GALGPAWDES	QLRSYSFPTR	PIPRLSQSDP
RAEELIENEE	PVVLTDTNLV	YPALKWDLEY	LQENIGNGDF	SVYSASTHKF
LYYDEKKMAN	FQNFKPRSNR	EEMKFHEFVE	KLQDIQQRGG	EERLYLQQTL
NDTVGRKIVM	DFLGFNWNWI	NKQQGKRGWG	QLTSNLLLLIG	MEGNVTPAHY
DEQQNFFAQI	KGYKRCILFP	PDQFECLYPY	PVHHPCDRQS	QVDFDNPDYE
RFPNFQNVVG	YETVVGPGDV	LYIPMYWWHH	IESLLNGGIT	ITVNFYKGA
PTPKRIEYPL	KAHQKVAIMR	NIEKMLGEAL	GNPQEVGPLL	NTMIKGRYN.

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