

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human FIH-1/HIF-1AN in ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 745122
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human FIH-1/HIF-1AN Met1-Asn349 Accession # Q9NWT6
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Factor-inhibiting hypoxia-inducible factor 1 (FIH-1), also known as HIF-1AN, is a 40-45 kDa oxygenase that hydroxylates asparagine, aspartate, and histidine residues in target proteins. Its homodimerization is required for substrate recognition. Under normoxic conditions, FIH-mediated hydroxylation inhibits the function of HIF-1 alpha and HIF-2 alpha by preventing their association with the transcriptional coactivator p300. FIH activity is inhibited under hypoxic conditions which allows HIF to mediate hypoxia-induced gene transcription. FIH also hydroxylates amino acids within the ankyrin repeat domains (ARD) of various other proteins including IκB-alpha, NFκB1, AnkyrinR, AnkyrinB, Tankyrase 2, MYPT1 smooth muscle myosin phosphatase, and Notch. Human FIH-1 shares 97% aa sequence identity with mouse and rat FIH-1.

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