

Human/Mouse FIH-1/HIF-1AN Antibody

Monoclonal Mouse IgG_{2B} Clone # 745122

Catalog Number: MAB7874

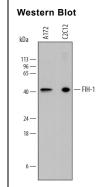
DESCRIPTION			
Species Reactivity	Human/Mouse		
Specificity	Detects human FIH-1/HIF-1AN in ELISAs.		
Source	Monoclonal Mouse IgG _{2B} Clone # 745122		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	E. coli-derived recombinant human FIH-1/HIF-1AN Met1-Asn349 Accession # Q9NWT6		
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.		

APPLICATIONS

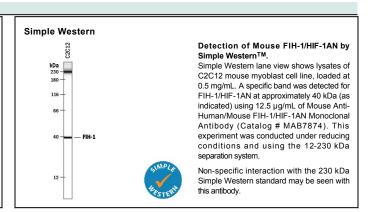
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website

	Recommended Concentration	Sample
Western Blot	0.25 μg/mL	See Below
Simple Western	12.5 μg/mL	See Below

ΠΔΤΔ



Detection of Human and Mouse FIH-1/HIF-1AN by Western Blot. Western blot shows lysates of A172 human glioblastoma cell line and C2C12 mouse myoblast cell line. PVDF membrane was probed with 0.25 µg/mL of Mouse Anti-Human/Mouse FIH-1/ HIF-1AN Monoclonal Antibody (Catalog # MAB7874) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for FIH-1/HIF-1AN at approximately 42 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.



PREPARATION AND STORAGE

Reconstitution Sterile PBS to a final concentration of 0.5 mg/mL

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 IkB-alpha, NFkB1, 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.

