HIF1A Ab

Cat.#: BF0593	Concn.: 1mg/ml	Mol.Wt.: 120kDa
Size: 50ul,100ul,200ul	Source: Mouse	Clonality: Monoclonal

Application:	ELISA 1/10000, WB 1/500 - 1/2000, IHC 1/200 - 1/1000, ICC 1/200 - 1/1000
Reactivity:	Human,Mouse,Monkey
Purification:	Affinity-chromatography.
Specificity:	HIF1A Ab detects endogenous levels of total HIF1A.
Immunogen:	Purified recombinant fragment of human HIF1A expressed in E. Coli.
Uniprot:	Q16665
Description:	Hypoxia-inducible factor-1 (HIF1) is a transcription factor found in mammalian cells cultured under reduced oxygen tension that plays an essential role in cellular and systemic homeostatic responses to hypoxia. HIF1 is a heterodimer composed of an alpha subunit and a beta subunit. The beta subunit has been identified as the aryl hydrocarbon receptor nuclear translocator (ARNT). This gene encodes the alpha subunit of HIF-1. Overexpression of a natural antisense transcript (aHIF) of this gene has been shown to be associated with nonpapillary renal carcinomas. Two alternative transcripts encoding different isoforms have been identified. (provided by RefSeq) Tissue specificity: Expressed in most tissues with highest levels in kidney and heart. Overexpressed in the majority of common human cancers and their metastases, due to the presence of intratumoral hypoxia and as a result of mutations in genes encoding oncoproteins and tumor suppressors.
Subcellular Location:	Cytoplasm. Nucleus. Cytoplasmic in normoxia, nuclear translocation in response to hypoxia. Colocalizes with SUMO1 in the nucleus, under hypoxia.
Tissue Specificity:	Expressed in most tissues with highest levels in kidney and heart. Overexpressed in the majority of common human cancers and their metastases, due to the presence of intratumoral hypoxia and as a result of mutations in genes encoding oncoproteins and tumor suppressors. A higher level expression seen in pituitary tumors as compared to the pituitary gland.
Similarity:	Contains two independent C-terminal transactivation domains, NTAD and CTAD, which function synergistically.

Their transcriptional activity is repressed by an intervening inhibitory domain (ID).

Storage Condition and Buffer:	Mouse IgG1 in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.

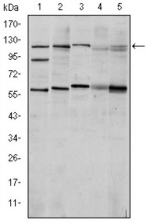
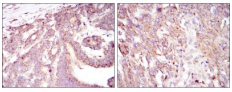
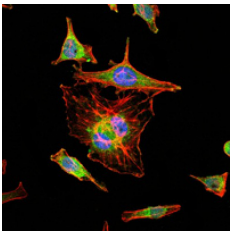


Figure 1: Western blot analysis using HIF1A mouse mAb against Cos7 (1), Hela (2), Jurkat (3), RAJI (4) and NIH/3T3 (5) cell lysate.



Immunohistochemical analysis of paraffin-embedded stomach cancer tissues (left) and brain tumor tissues (right) using HIF1A mouse mAb with DAB staining.



Immunofluorescence analysis of Hela cells using HIF1A mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.