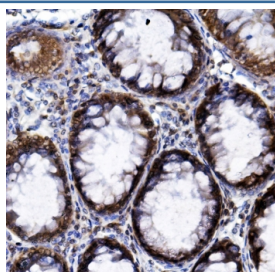


HIF1A Antibody / HIF-1 alpha (RQ5734)

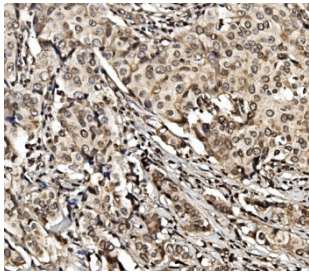
Catalog No.	Formulation	Size
RQ5734	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

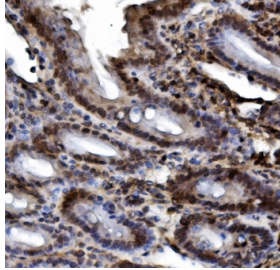
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q16665
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry : 1-2ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This HIF1A antibody is available for research use only.



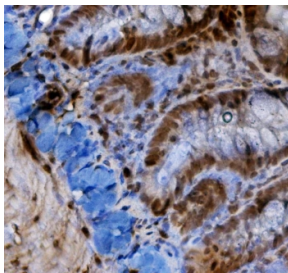
IHC staining of FFPE human rectal cancer with HIF1A antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



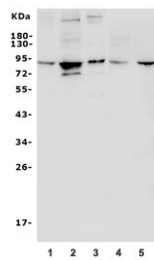
IHC staining of FFPE human breast cancer with HIF1A antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



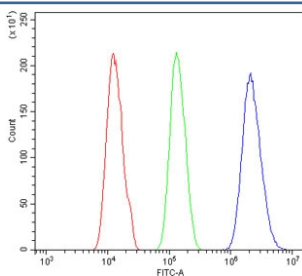
IHC staining of FFPE mouse intestine with HIF1A antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat intestine with HIF1A antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) A431, 2) HepG2, 3) U-2 OS, 4) rat PC-12 and 5) mouse thymus lysate.



Flow cytometry testing of human A431 cells with HIF1A antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= HIF1A antibody.

Description

HIF-1 α (Hypoxia-inducible factor 1 α , HIF1A) is a transcription factor that mediates cellular and systemic homeostatic responses to reduced O₂ availability in mammals, including angiogenesis, erythropoiesis and glycolysis. This gene was mapped to 14q21-q24. HIF-1 α transactivate genes required for energy metabolism and tissue perfusion and is necessary for embryonic development and tumor explant growth. HIF-1 α is over expressed during carcinogenesis, myocardial infarction and wound healing. It is crucial for the cellular response to hypoxia and is frequently over expressed in human cancers, resulting in the activation of genes essential for cell survival. HIF-1 α regulates the survival and function in the inflammatory microenvironment directly. It is a transcription factor that plays a pivotal role in cellular adaptation to changes in oxygen availability.

Application Notes

Optimal dilution of the HIF1A antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids Q603-Q814) was used as the immunogen for the HIF1A antibody.

Storage

After reconstitution, the HIF1A antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.