

Product Information

Size:

50ul

Reactivity:

Human, Mouse

Source:

Rabbit

Isotype:

IgG

Applications:

ELISA, WB, IHC

Recommended dilutions:

ELISA:1:1000-1:5000, WB:1:200-1:1000,
IHC:1:50-1:200

Protein Background:

Cellular oxygen sensor that catalyzes, under normoxic conditions, the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. Hydroxylates a specific proline found in each of the oxygen-dependent degradation (ODD) domains (N-terminal, NODD, and C-terminal, CODD) of HIF1A. Also hydroxylates HIF2A. Has a preference for the CODD site for both HIF1A and HIF2A. Hydroxylation on the NODD site by EGLN3 appears to require prior hydroxylation on the CODD site. Hydroxylated HIFs are then targeted for proteasomal degradation via the von Hippel-Lindau ubiquitination complex. Under hypoxic conditions, the hydroxylation reaction is attenuated allowing HIFs to escape degradation resulting in their translocation to the nucleus, heterodimerization with HIF1B, and increased expression of hypoxia-inducible genes. EGLN3 is the most important isozyme in limiting physiological activation of HIFs (particularly HIF2A) in hypoxia. Also hydroxylates PKM in hypoxia, limiting glycolysis.

Gene ID:

UPF1

Uniprot

Q92900

Synonyms:

UPF1 regulator of nonsense transcripts homolog (yeast)

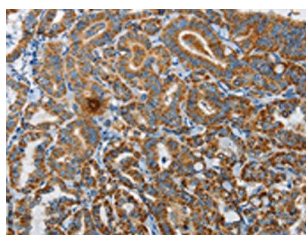
Immunogen:

Synthetic peptide of human UPF1.

Storage:

-20°C; C, pH7.4 PBS, 0.05% NaN₃, 40% Glycerol

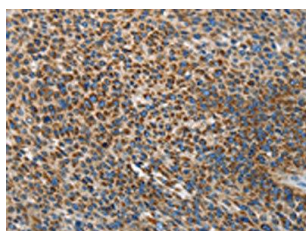
Product Images



The image on the left is immunohistochemistry of paraffin-embedded Human thyroid cancer tissue using PACO19163(UPF1 Antibody) at dilution 1/35, on the right is treated with synthetic peptide. (Original magnification: x—200).



Gel: 6%SDS-PAGE, Lysate: 60 μ g, Lane: Raji cells, Primary antibody: PACO19163(UPF1 Antibody) at dilution 1/300, Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution, Exposure time: 10 minutes.



The image on the left is immunohistochemistry of paraffin-embedded Human liver cancer tissue using PACO19163(UPF1 Antibody) at dilution 1/35, on the right is treated with synthetic peptide. (Original magnification: x—200).