

Product datasheet for TA388837M

WB

Mouse, Rat

Polyclonal

lot specific

<u>Q91U</u>Z4

Unconjugated

Rabbit

lgG

Primary Antibodies

Recommended dilution: WB:1:500-1:5000

Preservative: 0.03% Proclin 300

>95%, Protein G purified

1 year from dispatch.

Recombinant Mouse Egl nine homolog 3 protein (2-239AA)

Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Constituents: 50% Glycerol, 0.01M PBS, PH 7.4

Egln3 Rabbit Polyclonal Antibody

Product data:

Recommended Dilution:

Product Type:

Applications:

Reactivity:

Clonality:

Immunogen:

Formulation:

Concentration:

Purification:

Conjugation:

Database Link:

Storage: Stability:

Host: Isotype:

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GRIGENE Egln3 Rabbit Polyclonal Antibody – TA388837M

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 (Nterminal, 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 hypoxy-inducible genes. ELGN3 is the most important isozyme in limiting physiological activation of HIFs (particularly HIF2A) in hypoxia. Also hydroxylates PKM in hypoxia, limiting glycolysis. Under normoxia, hydroxylates and regulates the stability of ADRB2. Regulator of cardiomyocyte and neuronal apoptosis. In cardiomyocytes, inhibits the anti-apoptotic effect of BCL2 by disrupting the BAX-BCL2 complex. In neurons, has a NGFinduced proapoptotic effect, probably through regulating CASP3 activity. Also essential for hypoxic regulation of neutrophilic inflammation.

Product images:



Western Blot Positive WB detected in: Rat brain tissue, Mouse brain tissue All lanes: Egln3 antibody at 3.6µg/ml Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 28 kDa Observed band size: 35 kDa

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