

Mouse Egl nine homolog 1 (EGLN1) ELISA Kit

Catalog No: #EK10483

Package Size: #EK10483-1 48T #EK10483-2 96T

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Description

Product Name	Mouse Egl nine homolog 1 (EGLN1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	C1orf12; DKFZp761F179; ECYT3; HIFPH2; HPH2; PHD2; SM20; ZMYND6; HIF prolyl hydroxylase 2 egl nine homolog 1 egl nine-like protein 1 hypoxia-inducible factor prolyl hydroxylase 2 prolyl hydroxylase d
Accession No.	Q91YE3
Uniprot	Q91YE3
GeneID	112405;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.116 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:Sandwich**Test principle:**This assay employs a two-site sandwich ELISA to quantitate EGLN1 in samples. An antibody specific for EGLN1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyEGLN1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for EGLN1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of EGLN1 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**EGLN1 catalyzes the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. HIF is a transcriptional complex that plays a central role in mammalian oxygen homeostasis. This protein functions as a cellular oxygen sensor, and under normal oxygen concentration, modification by prolyl hydroxylation is a key regulatory event that targets HIF subunits for proteasomal destruction via the von Hippel-Lindau ubiquitylation complex. The genes encoding these proteins were cloned and termed PHD1, PHD2, and PHD3 by the authors. Direct modulation of recombinant enzyme activity by graded hypoxia, iron chelation, and cobaltous ions mirrored the characteristics of HIF induction in vivo, fulfilling requirements for these enzymes being oxygen sensors that regulate HIF.

Note: This product is for in vitro research use only