Recombinant Protein Technical Manual

Recombinant Mouse HPGD/15-PGDH Protein (His Tag)(Active)

RPES1462

Product Data:

Product SKU: RPES1462

Size: 20µg

Species: Mouse

Expression host: E. coli

Uniprot: Q8VCC1

Protein Information:

Molecular Mass:	30.6 kDa
AP Molecular Mass:	30 kDa
Tag:	C-His
Bio-activity:	Measured by its ability to bind Rhesus ErbB3-His in functional Elisa.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 8.0, 20% glycerol
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Functional ELISA
Synonyms:	15-PGDH;AV026552

Immunogen Information:

Sequence: Met 1-Ser 269

Background:

15-hydroxyprostaglandin dehydrogenase [NAD+], also known as Prostaglandin dehydrogenase 1, HPGD, and PGDH1, is a member of the short-chain dehydrogenases/reductases (SDR) family. Prostaglandins (PGs) play a key role in the onset of labor in many species and regulate uterine contractility and cervical dilatation. Therefore, the regulation of prostaglandin output by PG synthesizing and metabolizing enzymes in the human myometrium may determine uterine activity patterns in human labor both at preterm and at term. Prostaglandin dehydrogenase (PGDH) metabolizes prostaglandins (PGs) to render them inactive. HPGD is down-regulated by cortisol, dexamethasone and betamethasone and down-regulated in colon cancer. It is up-regulated by TGFB1. HPGD contributes to the regulation of events that are under the control of prostaglandin levels. HPGD catalyzes the NAD-dependent dehydrogenation of lipoxin A4 to form 15-oxo-lipoxin A4. and inhibits in vivo proliferation of colon cancer cells. Defects in HPGD are the cause of primary hypertrophic osteoathropathy autosomal recessive (PHOAR) , cranioosteoarthropathy (COA), and isolated congenital nail clubbing.