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# **HPGD/15-PGDH Monoclonal Antibody**

catalog number: AN200014P

Note: Centrifuge before opening to ensure complete recovery of vial contents.

### **Description**

Reactivity Human

Immunogen Recombinant Human HPGD / 15-PGDH protein

 Host
 Mouse

 Isotype
 IgG1

 Clone
 A858

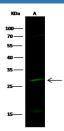
 Purification
 Protein A

Buffer 0.2 µm filtered solution in PBS

Applications Recommended Dilution

WB 1:500-1:1000

#### Data



Western Blot with HPGD / 15-PGDH Monoclonal Antibody at

dilution of 1:500. Lane A: LOVO Whole Cell Lysate,

Lysates/proteins at 30 µg per lane.

Observed-MW:29 kDa Calculated-MW:29 kDa

## **Preparation & Storage**

Storage This antibody can be stored at 2°C-8°C for one month without detectable loss of

activity. Antibody products are stable for twelve months from date of receipt when

stored at -20  $^{\circ}\text{C}$  to -80  $^{\circ}\text{C}$  . Preservative-Free. Avoid repeated freeze-thaw cycles .

Shipping Ice bag

### **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 osteoarthropathy autosomal recessive (PHOAR), cranio-osteoarthropathy (COA), and isolated congenital nail clubbing.

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