

Recombinant HPGD/15-PGDH Monoclonal Antibody

catalog number: **AN300028P**

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

Description

Reactivity	Human
Immunogen	Recombinant Human HPGD / 15-PGDH protein
Host	Rabbit
Isotype	IgG
Clone	7F11
Purification	Protein A
Buffer	0.2 µm filtered solution in PBS

Applications Recommended Dilution

ICC/IF	1:20-1:100
FCM	1:25-1:100

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°C to -80°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 TGFβ1. 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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