Human 15-PGDH/HPGD Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF5660

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human 15-PGDH/HPGD in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human 15-PGDH/HPGD Met1-Gln266 Accession # P15428
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

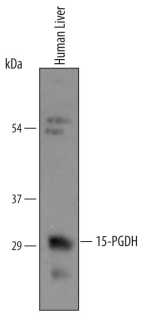
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Simple Western	10 µg/mL	See Below

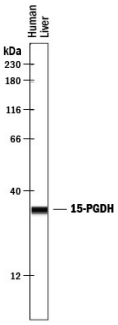
DATA

Western Blot



Detection of Human 15-PGDH/HPGD by Western Blot. Western blot shows lysates of human liver tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human 15-PGDH/HPGD Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5660) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for 15-PGDH/HPGD at approximately 29 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

Simple Western



Detection of Human 15-PGDH/HPGD by Simple Western™. Simple Western lane view shows lysates of human liver tissue, loaded at 0.2 mg/mL. A specific band was detected for 15-PGDH/HPGD at approximately 34 kDa (as indicated) using 10 µg/mL of Goat Anti-Human 15-PGDH/HPGD Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5660) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

HPGD, or 15-hydroxyprostaglandin dehydrogenase, is a NAD^+-linked dehydrogenase that oxidizes the hydroxyl group at position 15 of prostaglandins to a ketone, resulting in a loss of biological activity (1). HPGD is a major enzyme for the catabolism of prostaglandins. The enzyme is a member of the short-chain alcohol dehydrogenase family of enzymes (2). HPGD is a cytosolic enzyme expressed in most tissues, with highest expression levels in placenta, lung, and kidney (3). It is inhibited by aspirin and nonsteroidal anti-inflammatory drugs (4). Defects in HPGD are a cause of hypertrophic osteoarthropathy (5).

References:

1. Anggard, E. and B. Samuelsson (1964) J. Biol. Chem. **239**:4097.
2. Krook, M. *et al.* (1990) Biochemistry **29**:738.
3. Tai, H.H. (1976) Biochemistry **15**:4586.
4. Mak, O.T. *et al.* (1982) Biosci. Rep. **2**:503.
5. Uppal, S. *et al.* (2008) Nat. Genet. **40**:789.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449