



Anti-human 15-PGDH/HPGD Antibody

ORDERING INFORMATION

Catalog Number: AF5660

Lot Number: CCDV01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

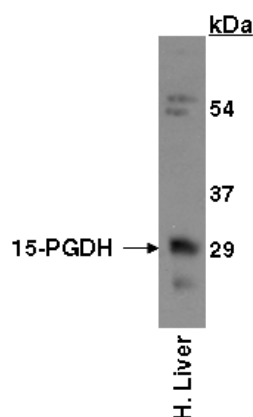
Reconstitution: sterile PBS

Specificity: human 15-PGDH

Immunogen: *E. coli*-derived rh15-PGDH

Ig Type: goat IgG

Applications: Western blot
Direct ELISA



Detection of 15-PGDH with AF5660.

Tissue lysates were resolved by SDS-PAGE, transferred to an Immobilon-P membrane and immunoblotted with 1.0 µg/mL goat anti-h15-PGDH.

Background

15-PGDH (15-hydroxyprostaglandin dehydrogenase NAD-linked; also HPGD) is a 28 - 29 kDa member of the short-chain non-metalloenzyme family of dehydrogenases. It is widely expressed, and antagonizes COX-2 by catalyzing the oxidation of 15-OH prostaglandin to metabolically inactive 15-keto metabolites. Human 15-PGDH is 266 amino acids (aa) in length. A Tyr at position # 151 serves as a proton acceptor, and a Ser at # 138 binds substrate. 15-PGDH functions as a nondisulfide-linked homodimer. There is one alternate splice form that shows a 12 aa substitution for aa 167 - 266. Full-length human 15-PGDH shares 88% aa identity with mouse 15-PGDH.

Preparation

Produced in goats immunized with purified, *E. coli*-derived, recombinant human 15-hydroxyprostaglandin dehydrogenase (rh15-PGDH; aa 1 - 266; Accession # P15428). Human 15-PGDH specific IgG was purified by human 15-PGDH affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for its ability to recognize human 15-PGDH in direct ELISAs and Western blots.

Applications

Western blot - An antibody concentration of 1.0 µg/mL is recommended.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human 15-PGDH. The detection limit for rh15-PGDH is approximately 0.5 ng/well.

Optimal dilutions should be determined by each laboratory for each application.