

**LTB4DH Polyclonal Antibody**  
Catalog # AP70780**Specification****LTB4DH Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q14914</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

**LTB4DH Polyclonal Antibody - Additional Information****Gene ID** 22949**Other Names**

PTGR1; LTB4DH; Prostaglandin reductase 1; PRG-1; 15-oxoprostaglandin 13-reductase; NADP-dependent leukotriene B4 12-hydroxydehydrogenase

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**LTB4DH Polyclonal Antibody - Protein Information****Name** PTGR1**Synonyms** LTB4DH**Function**

NAD(P)H-dependent oxidoreductase involved in metabolic inactivation of pro- and anti-inflammatory eicosanoids: prostaglandins (PG), leukotrienes (LT) and lipoxins (LX) (PubMed:<a href="http://www.uniprot.org/citations/25619643" target="\_blank">25619643</a>). Catalyzes with high efficiency the reduction of the 13,14 double bond of 15- oxoPGs, including 15-oxo-PGE1, 15-oxo-PGE2, 15-oxo-PGF1-alpha and 15- oxo-PGF2-alpha (PubMed:<a href="http://www.uniprot.org/citations/25619643" target="\_blank">25619643</a>). Catalyzes with lower efficiency the oxidation of the hydroxyl group at C12 of LTB4 and its derivatives, converting them into biologically less active 12-oxo-LTB4 metabolites (By similarity) (PubMed:<a href="http://www.uniprot.org/citations/25619643" target="\_blank">25619643</a>). Reduces 15-oxo-LXA4 to 13,14 dihydro-15-oxo-LXA4, enhancing neutrophil recruitment at the inflammatory site (By similarity). May play a role in metabolic detoxification of alkenals and ketones. Reduces alpha,beta-unsaturated alkenals and ketones, particularly those with medium-chain length, showing highest affinity toward (2E)-decenal and (3E)-3-nonen-2-one (PubMed:<a

<http://www.uniprot.org/citations/25619643> target="\_blank">25619643</a>). May inactivate 4-hydroxy-2-nonenal, a cytotoxic lipid constituent of oxidized low-density lipoprotein particles (By similarity).

#### Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q29073}.

#### Tissue Location

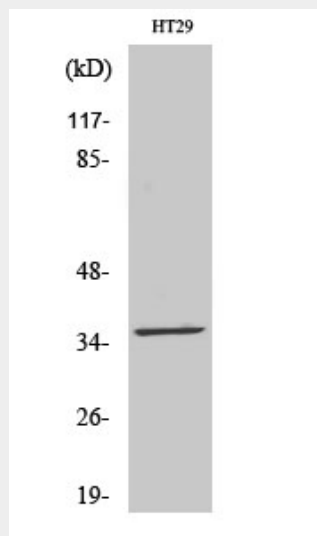
High expression in the kidney, liver, and intestine but not in leukocytes.

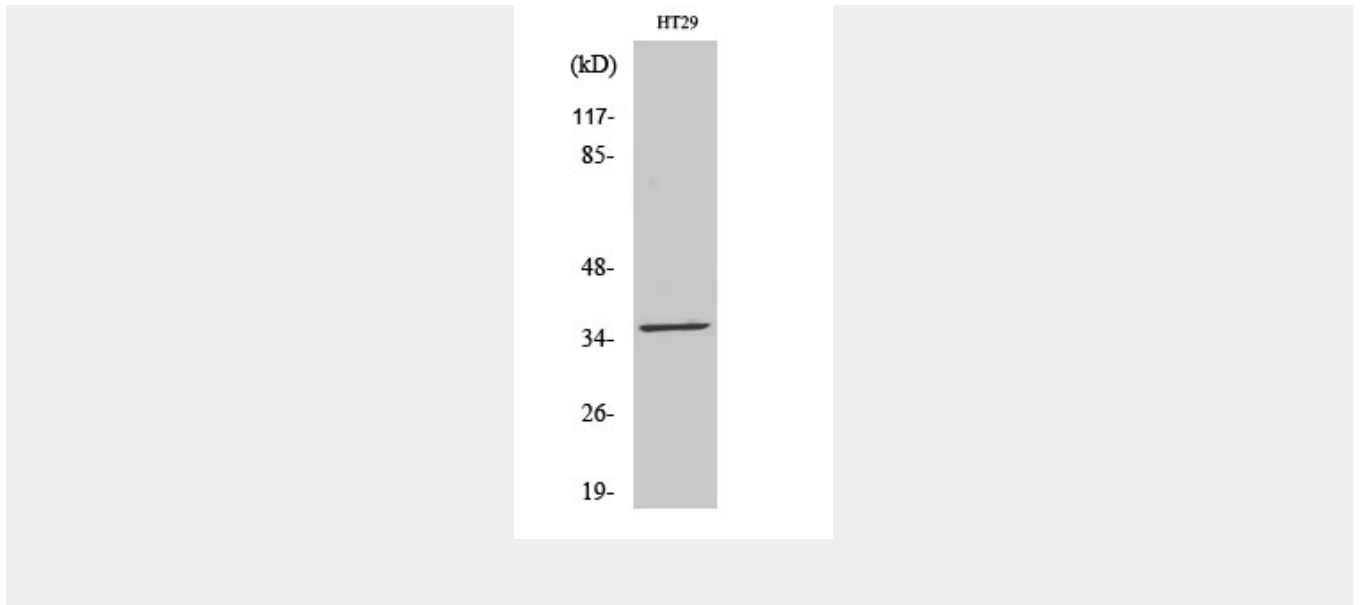
### LTB4DH Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### LTB4DH Polyclonal Antibody - Images





### **LTB4DH Polyclonal Antibody - Background**

Functions as 15-oxo-prostaglandin 13-reductase and acts on 15-oxo-PGE1, 15-oxo-PGE2 and 15-oxo-PGE2-alpha. Has no activity towards PGE1, PGE2 and PGE2-alpha (By similarity). Catalyzes the conversion of leukotriene B4 into its biologically less active metabolite, 12-oxo-leukotriene B4. This is an initial and key step of metabolic inactivation of leukotriene B4.