

# Datasheet for ABIN7551097 PTGR1 Protein (AA 1-329) (His tag)



#### Overview

Quantity:	1 mg
Target:	PTGR1
Protein Characteristics:	AA 1-329
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PTGR1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat PTGR1 Protein expressed in mammalien cells.
Sequence:	MVRTKTWTLK KHFVGYPTNS DFELKTAELP PLKNGEVLLE ALFLTVDPYM RVAAKRLKEG
	DTMMGQQVAK VVESKNVALP KGTIVLASPG WTTHSISDGK DLEKLLTEWP DTIPLSLALG
	TVGMPGLTAY FGLLEICGVK GGETVMVNAA AGAVGSVVGQ IAKLKGCKVV GAVGSDEKVA
	YLQKLGFDVV FNYKTVESLE ETLKKASPDG YDCYFDNVGG EFSNTVIGQM KKFGRIAICG
	AISTYNRTGP LPPGPPPEIV IYQELRMEAF VVYRWQGDAR QKALKDLLKW VLEGKIQYKE
	YIIEGFENMP AAFMGMLKGD NLGKTIVKA Sequence without tag. The proposed Purification-
	Tag is based on experiences with the expression system, a different complexity of the
	protein could make another tag necessary. In case you have a special request, please
	contact us.
Characteristics:	Key Benefits:

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

### Target Details

Target:	PTGR1

#### Alternative Name:

PTGR1 (PTGR1 Products)

Background:

Prostaglandin reductase 1 (PRG-1) (15-oxoprostaglandin 13-reductase) (EC 1.3.1.48) (Dithiolethione-inducible gene 1 protein) (D3T-inducible gene 1 protein) (DIG-1) (Leukotriene B4 12-hydroxydehydrogenase) (NAD(P)H-dependent alkenal/one oxidoreductase) (EC 1.3.1.74),FUNCTION: NAD(P)H-dependent oxidoreductase involved in metabolic inactivation of pro- and anti-inflammatory eicosanoids: prostaglandins (PG), leukotrienes (LT) and lipoxins (LX) (PubMed:25619643). 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:25619643). 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 (PubMed:25619643) (By similarity). 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:25619643). May inactivate 4-hydroxy-2-nonenal, a

## **Target Details**

Expiry Date:

12 months

Target Details	
	cytotoxic lipid constituent of oxidized low-density lipoprotein particles (By similarity).
	{ECO:0000250 UniProtKB:P97584, ECO:0000250 UniProtKB:Q29073,
	ECO:0000269 PubMed:25619643}.
Molecular Weight:	35.9 kDa
UniProt:	Q14914
Application Details	
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
	as well. As the protein has not been tested for functional studies yet we cannot offer a
	guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
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