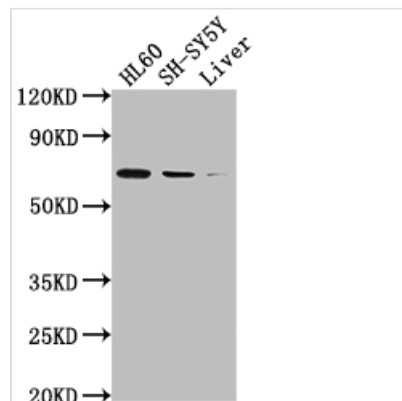




PTGS1 Antibody

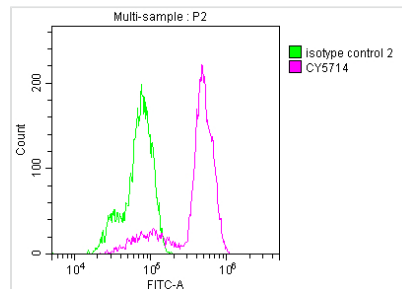
Product Code	CSB-RA918236A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P23219
Immunogen	A synthesized peptide derived from human COX1
Species Reactivity	Human, Mouse
Tested Applications	ELISA, WB, FC; Recommended dilution: WB:1:500-1:5000, FC:1:20-1:200
Relevance	Converts arachidonate to prostaglandin H2 (PGH2), a committed step in prostanoid synthesis. Involved in the constitutive production of prostanoids in particular in the stomach and platelets. In gastric epithelial cells, it is a key step in the generation of prostaglandins, such as prostaglandin E2 (PGE2), which plays an important role in cytoprotection. In platelets, it is involved in the generation of thromboxane A2 (TXA2), which promotes platelet activation and aggregation, vasoconstriction and proliferation of vascular smooth muscle cells.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cardiovascular; Immunology; Metabolism; Signal transduction
Gene Names	PTGS1
Accession NO.	6B6

Image



Western Blot

Positive WB detected in: HL60 whole cell lysate, SH-SY5Y whole cell lysate, Mouse liver tissue
 All lanes: PTGS1 antibody at 1:2000
 Secondary
 Goat polyclonal to rabbit IgG at 1/50000 dilution
 Predicted band size: 69, 65, 62, 57, 72, 73 kDa
 Observed band size: 72 kDa



Overlay histogram showing HeLa cells stained with CSB-RA918236A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then incubated in 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody ($1\mu\text{g}/1*10^6\text{cells}$) for 1 h at 4°C . The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30min at 4°C . Control antibody (green line) was Rabbit IgG ($1\mu\text{g}/1*10^6\text{cells}$) used under the same conditions. Acquisition of $>10,000$ events was performed.

Description

The production of the recombinant PTGS1 antibody depended on Single B Cell technology. There are 3 main steps in the production: 1, Isolation of single B cells. High-throughput methods could be used to obtain the efficient identification and desired specificity of B cells. 2, Single B cell antibody sequencing and cloning. In this step, the antibody gene sequence of PTGS1 was obtained and introduced to plasmids, which then would be transferred to mammalian cells for in vitro expression of the PTGS1 antibody. 3, Screening of antibodies. The target antibody was obtained in this step. And it has been validated in ELISA, WB, FC.

PTGS1, also called COX-1, is a prostaglandin-producing enzyme. PTGS1 is primarily expressed in the stomach, kidney, and platelets as an intrinsic housekeeping enzyme. It primarily regulates peripheral vascular resistance, maintains renal blood flow, protects the gastric mucosa, and modulates platelet aggregation. PTGS1 is also important for the pathophysiology of inflammation, arthritic illness, and cancer. PTGS1 has been reported to be upregulated in resident inflammatory cells, which contribute to performing the acute inflammatory response and cell differentiation.