Product Information Sheet

# Polyclonal Anti-Cyclooxygenase-1, *COX1 (Magnetic Bead Conjugate)*

**Catalogue No.** PA1027-M

**Lot No.** 05L01

**Ig type:** rabbit IgG

**Size:** 100µg/vial

**Specificity**

Human, mouse, rat.

No cross reactivity with other proteins.

**Recommended application**

ImmunoPrecipitation (IP)

## Immunogen

A synthetic peptide corresponding to a sequence near the N-terminal of human PTGS1(COX1), different to the related rat and mouse sequence by two amino acids.

## Purity

Immunogen affinity purified.

## Contents

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg $NaN_3$.

## Storage

Store at 4˚C for frequent use.

## Description

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation

## BACKGROUND

Cyclooxygenase 1(COX1), also known as Prostaglandin-endoperoxide synthase (PTGS1) or mitochondrial cytochrome c oxidase subunit 1, is the key enzyme in prostaglandin biosynthesis. The gene was approximately 40 kb long, with 11 protein-coding exons. There were 599 amino acid residues with a calculated molecular mass of approximately 68 kD. By analysis of a human/hamster somatic hybrid DNA panel, Funk et al. (1991) demonstrated that the PTGS1 gene maps to chromosome 9. Human prostaglandin endoperoxide synthase exhibited 91% amino acid identity with the sheep enzyme. Prostaglandin synthase 1 gene disruption in mice reduces arachidonic acid-induced inflammation and indomethacin-induced gastric ulceration.

## *REFERENCE*

1. Yokoyama, C.; Tanabe, T. : Cloning of human gene encoding prostaglandin endoperoxide synthase and primary structure of the enzyme. *Biochem. Biophys. Res. Commun.* 165: 888-894, 1989.

2. Langenbach, R.; Morham, S. G.; Tiano, H. F.; Loftin, C. D.; Ghanayem, B. I.; Chulada, P. C.; Mahler, J. F.; Lee, C. A.; Goulding, E. H.; Kluckman, K. D.; Kim, H. S.; Smithies, O. : Prostaglandin synthase 1 gene disruption in mice reduces arachidonic acid-induced inflammation and indomethacin-induced gastric ulceration. *Cell* 83: 483-492, 1995.



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