

Cyclooxygenase 2 Human Recombinant (Insect)

CATALOG NO:	P1344-200 P1344-1000	200 µU 1000 µU
ALTERNATE NAMES:	Cox-2, Prostaglandin G/H synthase 2 (PGHS-2)	
SOURCE:	Insect Cells (sf9)	
PURITY:	>95% by SDS-PAGE	
MOL. WEIGHT:	68 kDa, (1-593aa) with N-terminal His-tag	
FORM:	Lyophilized	
FORMULATION:	Proprietary buffer	
RECONSTITUTION:	Reconstitute in deionized water to final concentration of 10 µU/µl	
STORAGE CONDITIONS:	Lyophilized enzyme can be stored at -20°C. The reconstituted enzyme can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freeze-thaw cycles.	
DESCRIPTION:	Cyclooxygenase (COX), also known as prostaglandin-endoperoxide synthase (PTGS, EC 1.14.99.1), is an enzyme that is responsible for the formation of important biological mediators called prostanoids, including prostaglandins, prostacyclin and thromboxane. COX is the central enzyme in the biosynthetic pathway to prostanoids from arachidonic acid. COX consists of two isoforms, COX-1 and COX-2. The COX enzymes, membrane-associated heme proteins that have cyclooxygenase and peroxidase activities, are targets of NSAID (non-steroidal anti-inflammatory drugs). COX-2 catalyzes the conversion of arachidonic acid to prostaglandin H2.	
SPECIFIC ACTIVITY:	Specific activity is ≥100 mU/mg	
UNIT DEFINATION:	One unit of COX activity consumes 1.0 µmol of oxygen using arachidonic acid per minute at pH 8.0, 25°C.	
APPLICATION AND USAGE:	Active recombinant human Cox-2 is useful in studying enzyme regulation, determining target substrates and NSAIDs screenings etc. Biovision's recombinant Cox-2 produced in insect cells is highly active and stable.	

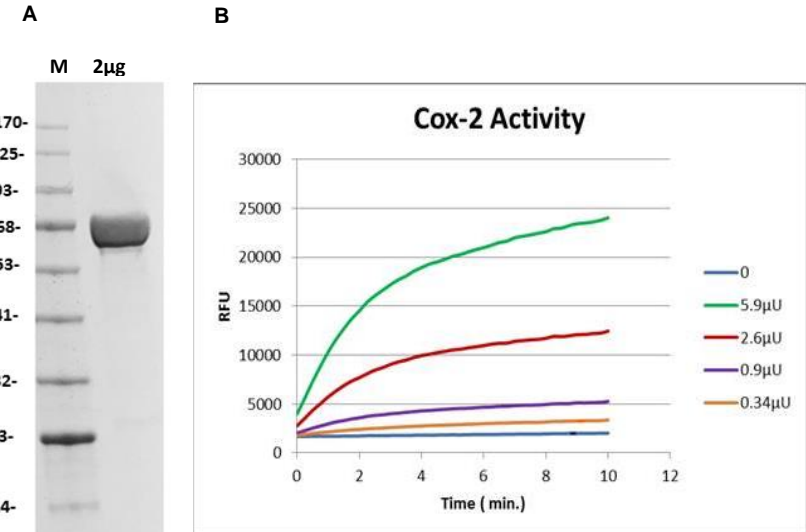


Figure A. SDS-PAGE of Cox-2: Recombinant Cox-2 is loaded on the SDS-PAGE (4-20%) under reducing conditions and stained with Coomassie Blue.

Figure B. Cox-2 Activity Assay: the activity of Cox-2 is determined by using BioVision's Cyclooxygenase (CoX) Activity Assay Kit (Cat. No. K549).

RELATED PRODUCTS:

- COX-2 Inhibitor Screening Kit (Cat. No. K547)
- Cyclooxygenase (COX) Activity Assay Kit (Cat. No. K549)
- COX-1 Inhibitor Screening Kit (Fluorometric) (Cat. No. K548)

FOR RESEARCH USE ONLY! Not to be used on humans.