



# Mouse cyclooxygenase-2, COX-2 ELISA Kit

<b>Product Code</b>	CSB-E12910m
<b>Protein Biological Process 2</b>	Lipogenesis and lipometabolism
<b>Abbreviation</b>	PTGS2
<b>Protein Biological Process 1</b>	Biosynthesis/Metabolism
<b>Target Name</b>	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)
<b>Uniprot No.</b>	Q05769
<b>Alias</b>	COX-2, COX2, GRIPGHS, PGG/HS, PGHS-2, PHS-2, hCox-2, cyclooxygenase 2b prostaglandin G/H synthase and cyclooxygenase prostaglandin-endoperoxide synthase 2
<b>Product Type</b>	ELISA Kit
<b>Immunogen Species</b>	Mus musculus (Mouse)
<b>Protein Biological Process 3</b>	Fatty acid biosynthesis
<b>Sample Types</b>	serum, plasma, tissue homogenates, cell lysates
<b>Detection Range</b>	31.25 pg/mL-2000 pg/mL
<b>Sensitivity</b>	7.8 pg/mL
<b>Assay Time</b>	1-5h
<b>Sample Volume</b>	50-100ul
<b>Detection Wavelength</b>	450 nm
<b>Lead Time</b>	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
<b>Research Area</b>	Metabolism
<b>Quality Control</b>	<p>A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm.</p> <p>An incubator can provide stable incubation conditions up to 37°C±5°C.</p> <p>Centrifuge</p> <p>Vortex</p> <p>Squirt bottle, manifold dispenser, or automated microplate washer</p> <p>Absorbent paper for blotting the microtiter plate</p> <p>50-300ul multi-channel micropipette</p> <p>Pipette tips</p> <p>Single-channel micropipette with different ranges</p> <p>100ml and 500ml graduated cylinders</p> <p>Deionized or distilled water</p> <p>Timer</p>



Test tubes for dilution

<b>Gene Names</b>	Ptgs2
<b>Tag Info</b>	quantitative
<b>Protein Description</b>	Sandwich
<b>Component</b>	<p>A micro ELISA plate ---The 96-well plate has been pre-coated with an anti-mouse COX-2 antibody. This dismountable microplate can be divided into 12 x 8 strip plates.</p> <p>Two vials lyophilized standard ---Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve.</p> <p>One vial Biotin-labeled COX-2 antibody (100 x concentrate) (120 µl/bottle) ---Act as the detection antibody.</p> <p>One vial HRP-avidin (100 x concentrate) (120 µl/bottle) ---Bind to the detection antibody and react with the TMB substrate to make the solution chromogenic.</p> <p>One vial Biotin-antibody Diluent (15 ml/bottle) ---Dilute the Biotin-antibody.</p> <p>One vial HRP-avidin Diluent (15 ml/bottle) ---Dilute the HRP-avidin solution.</p> <p>One vial Sample Diluent (50 ml/bottle)---Dilute the sample to an appropriate concentration.</p> <p>One vial Wash Buffer (25 x concentrate) (20 ml/bottle) ---Wash away unbound or free substances.</p> <p>One vial TMB Substrate (10 ml/bottle) ---Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue.</p> <p>One vial Stop Solution (10 ml/bottle) ---Stop the color reaction. The solution color immediately turns from blue to yellow.</p> <p>Four Adhesive Strips (For 96 wells) --- Cover the microplate when incubation.</p> <p>An instruction manual</p>
<b>Description</b>	<p>This Mouse PTGS2 ELISA Kit was designed for the quantitative measurement of Mouse PTGS2 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 31.25 pg/mL-2000 pg/mL and the sensitivity is 7.8 pg/mL.</p>
<b>Target Details</b>	<p>Prostaglandin-endoperoxide synthase (PTGS), also known as cyclooxygenase, is the key enzyme in prostaglandin biosynthesis, and acts both as a dioxygenase and as a peroxidase. There are two isozymes of PTGS: a constitutive PTGS1 and an inducible PTGS2, which differ in their regulation of expression and tissue distribution. This gene encodes the inducible isozyme. It is regulated by specific stimulatory events, suggesting that it is responsible for the prostanoid biosynthesis involved in inflammation and mitogenesis.</p>
<b>Product Precision</b>	<p>Intra-assay Precision (Precision within an assay): CV%&lt;8%</p> <p>Three samples of known concentration were tested twenty times on one plate to assess.</p> <p>Inter-assay Precision (Precision between assays): CV%&lt;10%</p> <p>Three samples of known concentration were tested in twenty assays to assess.</p>

**Linearity**



To assess the linearity of the assay, samples were spiked with high concentrations of mouse COX-2 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	88
	Range %	80-92
1:2	Average %	98
	Range %	91-105
1:4	Average %	100
	Range %	92-110
1:8	Average %	93
	Range %	86-98

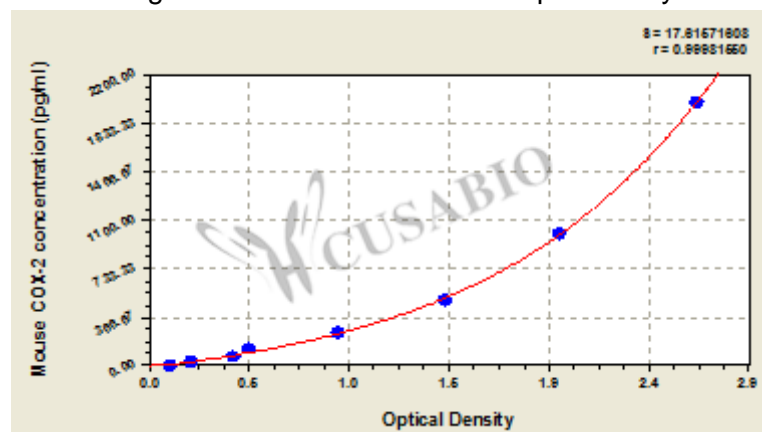
### Recovery

The recovery of mouse COX-2 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	96	89-98
EDTA plasma (n=4)	96	90-100

### Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



pg/ml	OD1	OD2	Average	Corrected
2000	2.660	2.654	2.657	2.547
1000	2.107	2.046	1.994	1.884
500	1.494	1.385	1.440	1.330
250	0.932	0.911	0.922	0.812
125	0.502	0.489	0.496	0.386
62.5	0.403	0.398	0.415	0.305
31.25	0.223	0.207	0.215	0.105
0	0.114	0.106	0.110	?

### Msds

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