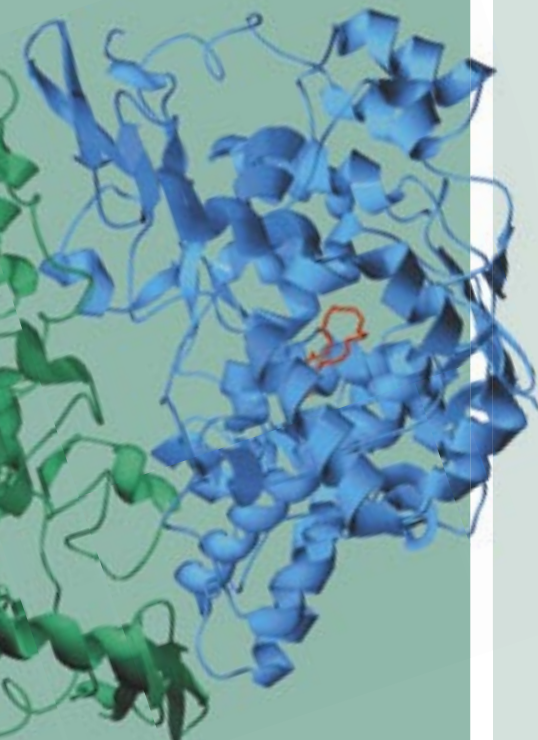


New COX-2 ELISA Kit



Cyclooxygenase (COX) enzymes catalyze the synthesis of prostaglandins (PGs) from arachidonic acid. There are two isoforms of COX, COX-1 and COX-2. While COX-1 is expressed constitutively and appears to be responsible for the production of prostaglandins (PGs) that control normal physiologic functions, expression of COX-2 is induced by various inflammatory and mitogenic stimuli such as cytokines, growth factors or tumor promoters. Numerous experimental studies suggest a relationship between COX-2 expression and carcinogenesis. For example, increased amounts of COX-2 have been observed in breast cancers that overexpress HER-2/*neu*. Furthermore, treatment with selective inhibitors of COX-2 reduced the formation of tongue, esophageal, intestinal, breast, skin, lung, and bladder tumors in experimental animals

The human COX-2 ELISA is a complete kit for the quantitative determination of human COX-2 in cell lysates, tissue extracts, and biological fluids. The kit uses a rabbit anti-human COX-2 polyclonal antibody as the capture antibody. Test standards and samples are incubated in pre-coated well strips. Following a wash step, the detector antibody (monoclonal), followed by goat anti-mouse IgG conjugated to horseradish peroxidase (HRP), is added. The addition of the substrate and its subsequent reaction with the HRP creates a blue-colored solution. COX-2 levels are quantified by measuring absorbances at 450 nm (preferably with reference wavelength set at 540-600 nm) and comparing those values with the standard curve.

The COX-2 ELISA Kit is:

- Highly sensitive: detects COX-2 at 2.5–200 ng/ml
- Quantitative: includes recombinant COX-2 for standard curve comparisons
- Versatile: quantitates human COX-2 in cell lysates, tissue extracts, and biological fluids
- Convenient: 96-well, colorimetric detection

EMD Biosciences

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Orders

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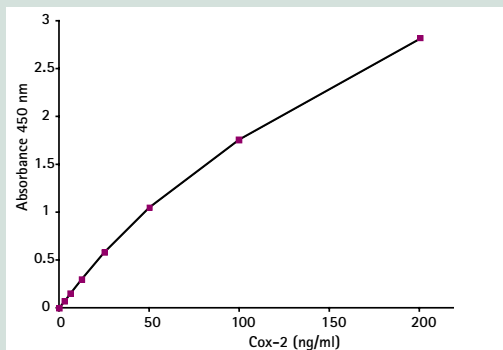


Figure 1: Standard curve of recombinant human COX-2. Typical results for purified recombinant COX-2. Range of assay: 2.5–200 ng/ml. Lowest level of detection is approximately 2 ng/ml.

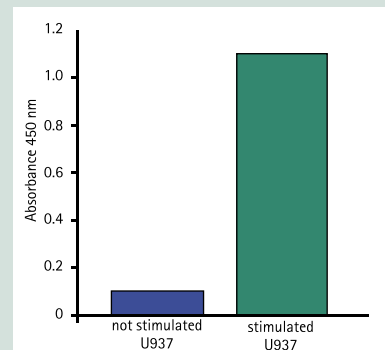


Figure 2: LPS-induced COX-2 protein expression in U937 cells. U937 cells were stimulated lysed and assayed according to the protocol. 50 µg total protein was assayed per sample.

COX-2 ELISA

Cat. No. CBA053

\$525

See related oxidative stress research products on reverse



Related Products for Oxidative Stress

Product	Cat. No.	Format	Form	Detection method	Sensitivity	Assay range	Sample type	Price
Catalase Assay Kit	219265	96-well plate	96 Tests	Colorimetric		0.25-4 nmol/min/ml	Plasma, serum, erythrocyte lysates, tissue homogenates, and cell lysates	\$386
Cu/Zn Superoxide Dismutase ELISA Kit	QIA97	96-well plate	96 Tests	Colorimetric	70 pg/ml	0.08-5 ng/ml	Cell culture supernatant, serum, plasma, urine, amniotic fluid, and other biological fluids	\$475
Glutathione Assay Kit	354102	cuvette	100 Tests	Colorimetric	5.0 μ M RSH		Cell lysates, tissue homogenates	\$467
Glutathione Assay Kit II	354103	96-well plate	96 Tests	Colorimetric		0-16 μ M for GSH or 0-8 μ M for GSSG	Plasma, serum, erythrocyte lysate, tissue samples, and cultured cells	\$386
Glutathione Peroxidase Assay Kit	353919	96-well plate	96 Tests	Colorimetric		50-344 nmol/min/ml	Cells, tissues, plasma	\$386
Glutathione Peroxidase, Cellular Assay Kit	354104	cuvette	100 Tests	Colorimetric		5.6-24 mU*/ml	Cell lysates, tissue extracts, erythrocyte lysates	\$597
Glutathione Peroxidase ELISA Kit	353918	96-well plate	96 Tests	Colorimetric	2.5 ng/ml		human blood plasma, human blood serum	\$755
Glutathione Reductase Assay Kit II	359963	96-well plate	96 Tests	Colorimetric		20-255 nmol/min/ml	Plasma, erythrocyte lysates, tissue homogenates, and cell lysates	\$386
GSH/GSSG Ratio Assay Kit	371757	cuvette	200 Tests	Colorimetric	9 nM GSSG		cell lysates, tissue extracts, blood	\$884
Lactoferrin ELISA Kit	427275	96-well plate	96 Tests	Colorimetric	> 1 ng/ml		Plasma, urine, cell culture supernatant, bronchoalveolar lavage, and cerebrospinal fluid	\$755
Lipid Hydroperoxide (LPO) Assay Kit	437639	cuvette or 96-well plate	100 Tests	Colorimetric		0.25-5 nmol hydroperoxide per assay tube	Tissues, cultured cells, plant materials, foods, biological fluids, etc.	\$386**
Lipid Peroxidation Assay Kit	437634	cuvette	100 Tests	Colorimetric	0.5 μ M MDA or HAE		Tissues and cellular extracts	\$584
InnoZyme™ Myeloperoxidase Activity Kit	CBA024	96-well plate	96 Tests	Colorimetric	330 pg/ml	5-100 ng/ml	Cell lysates, CSF, and serum	\$395
Myeloperoxidase ELISA Kit	475918	96-well plate	96 Tests	Colorimetric	>1.5 ng/ml		Plasma, urine, cell culture supernatant, bronchoalveolar lavage, and cerebrospinal fluid	\$755
OxyDNA Assay Kit, Fluorometric	500095		50 Tests	Flow cytometry or fluorescence microscopy			Cells	\$546
Superoxide Anion Detection Kit, Chemiluminescent	574590	round-bottom polystyrene luminometer tubes	100 Tests	Chemiluminescent			Cell cultures	\$421
Superoxide Dismutase Assay Kit II	574601	96-well plate	100 Tests	Colorimetric		0.025-0.25 unit* per ml SOD	Plasma, serum, erythrocyte lysates, and other lysates, tissue homogenates, and cell lysates	\$386
Total Antioxidant Status Assay Kit	615700	cuvette	50 Tests	Colorimetric		0-25 nmol/10 μ l plasma	Serum or plasma	\$594

*See product details on website for unit definition.

** Attention: Due to the nature of the Hazardous Materials in this shipment, additional shipping charges may be applied to your order. Please contact your local sales office for more information regarding these charges.

More information available at www.calbiochem.com/stresskits