**BACKGROUND**

Prostaglandins are a diverse group of autocrine and paracrine hormones that mediate many cellular and physiologic processes. Prostaglandin H2 (PGH2) is an intermediate in formation of the prostaglandins. Two prostaglandin synthases that catalyze the formation of PGH2 from arachidonic acid (AA) are cyclooxygenase-1 and cyclooxygenase-2. Cyclooxygenase-2, or Cox-2, is efficiently induced in migratory cells responding to pro-inflammatory stimuli and is considered to be an important mediator of inflammation. An alternative form of the protein, designated Cox-1, is constitutively expressed in most tissues and is thought to serve in general “housekeeping” functions. Both enzymes are targets for the nonsteroidal therapeutic anti-inflammatory drugs, NSAIDs.

**CHROMOSOMAL LOCATION**

Genetic locus: PTGS2 (human) mapping to 1q31.1; Ptgs2 (mouse) mapping to 1 G1.

**SOURCE**

Cox-2 (H-62) is a rabbit polyclonal antibody raised against amino acids 50-111 of Cox-2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as phycoerythrin conjugate for flow cytometry, sc-7951 PE, 100 tests.

**APPLICATIONS**

Cox-2 (H-62) is recommended for detection of Cox-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Cox-2 (H-62) is also recommended for detection of Cox-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Cox-2 siRNA (h); sc-29279, Cox-2 siRNA (m); sc-29278, Cox-2 shRNA Plasmid (h); sc-29279-SH, Cox-2 shRNA Plasmid (m); sc-29278-SH, Cox-2 shRNA (h) Lentiviral Particles: sc-29279-V and Cox-2 shRNA (m) Lentiviral Particles: sc-29278-V.

Molecular Weight of Cox-2: 70-72 kDa.

Positive Controls: A549 cell lysate: sc-2413, CCD-1064Sk cell lysate: sc-2263 or RAW 264.7 + LPS induced RAW 264.7 whole cell lysate.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

**SELECT PRODUCT CITATIONS**


