

Cox-2 (h): 293 Lysate: sc-113099

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. Cyclooxygenase-1 (Cox-1) and cyclooxygenase-2 (Cox-2) are prostaglandin synthases that catalyze the formation of PGH₂ from arachidonic acid (AA). Cox-1 and Cox-2 are isoforms of prostaglandin-endoperoxidase synthase (PTGS). Cox-1 is constitutively expressed in most tissues and is thought to serve in general "housekeeping" functions. Cox-2 is efficiently induced in migratory cells responding to pro-inflammatory stimuli and is considered to be an important mediator of inflammation. Both enzymes are targets for the nonsteroidal therapeutic anti-inflammatory drugs, NSAIDs.

REFERENCES

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6. Adams, J., Collaco-Moraes, Y. and de Bellerche, J. 1996. Cyclooxygenase-2 induction in cerebral cortex: an intracellular response to synaptic excitation. *J. Neurochem.* 66: 6-13.
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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: PTGS2 (human) mapping to 1q31.1.

PRODUCT

Cox-2 (h): 293 Lysate represents a lysate of human Cox-2 transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Cox-2 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive Cox-2 antibodies. Recommended use: 10-20 μ l per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

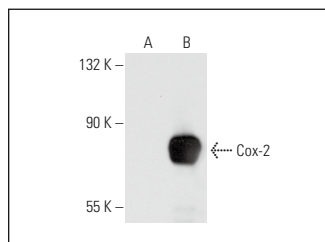
Cox-2 (29): sc-19999 is recommended as a positive control antibody for Western Blot analysis of enhanced human Cox-2 expression in Cox-2 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

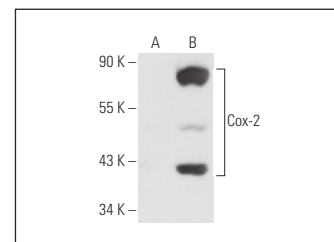
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Cox-2 (29): sc-19999. Western blot analysis of Cox-2 expression in non-transfected: sc-110760 (A) and human Cox-2 transfected: sc-113099 (B) 293 whole cell lysates.



Cox-2 (D-12): sc-166475. Western blot analysis of Cox-2 expression in non-transfected: sc-110760 (A) and human Cox-2 transfected: sc-113099 (B) 293 whole cell lysates.

RESEARCH USE

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