ALPHA DIAGNOSTIC INTERNATIONAL

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Product Specification Sheet

Human CYCLOOXYGENASE-1 (PGHS-1; PHS-1; Prostaglandin-endoperoxide synthase-1)

Cat # COX12-D Human COX1 CDNA Probe **SIZE**: 2 ug **FORM**: Soln Powder

Product Source

Two isoforms of Prostaglandin H synthase are well characterized, namely COX1 (also called PGHS-1; PHS-1; Prostaglandin-endoperoxide synthase-1) and COX2 (also called PGHS-2; Prostaglandin-endoproxide synthase-2 and PHSII). Both forms of COX proteins are membrane associated heme proteins containing cyclooxygenase and peroxidase activities. These enzymes are targets of NSAID (Non steroidal anti inflammatory drugs) such as aspirin.

COX1 is composed of 70KD subunits (1) and is constitutively expressed although significant enhancement of COX1 expression can be induced in some cell types. High expression is observed in gastrointestinal tissues. COX-1 expression is regulated developmentally and in response to a variety of other stimuli. Northern blot analysis reveals that the mRNA for human COX-1 is approximately 2.9 kb in length. The mRNA is expressed in nearly all tissues of the body.

The homology of the human COX-1 cDNA probe with mouse and rat is 59.8%.

Size of the probe 0.9 Kb (gel purified) **Quantity and Concentration** 2 ug lyophilized powder

Applications

Each vial contains 2 ug of an isolated ds cDNA fragment in a lyophilized form. This cDNA probe is derived from the coding region of the human COX-1 mRNA and has a length of approximately 0.9 kbp. The probe may be labeled by radioactive, or non-radioactive compounds using either random primer labeling or nick translation. We recommend reconstitution of the probe just prior to use with either water or TE buffer. Store the reconstituted probe at -20°C. Avoid repeated freezing and thawing.

Form & Storage of cDNA

At least 1 year at –70oC. Avoid repeated freeze and thaw.

References:

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*This Product is for *in vitro* research use only.

Related materials available from ADI

Anti-Cox-1 and Cox-2 antibodies and positive controls	COX12-D	71217A

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