PGE synthase 2 (A-2): sc-514224

**BACKGROUND**

PGE synthase 2, also known as PTGES2, PGES2, prostaglandin E synthase 2, microsomal prostaglandin E synthase 2 (mPGES-2) or GATE-binding factor-1 (GBF1), is a 377 amino acid isomerase that belongs to the GST superfamily and catalyzes the conversion of prostaglandin H2 to prostaglandin E2. Synthesized as a single-pass membrane protein of the Golgi apparatus, PGE synthase 2 is widely expressed with high levels found in liver, kidney, heart and brain, and may activate IFN-γ transcriptional activity. Containing a glutaredoxin domain and a GST C-terminal domain, PGE synthase 2 exists as a homodimer that interacts with both EXOSC10 and C/EBP β, and is known to bind dihydrolipoic acid as a cofactor.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: PTGES2 (human) mapping to 9q34.11; Ptgds2 (mouse) mapping to 2 B.

**SOURCE**

PGE synthase 2 (A-2) is a mouse monoclonal antibody raised against amino acids 284-377 mapping at the C-terminus of PGE synthase 2 of human origin.

**PRODUCT**

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

**APPLICATIONS**

PGE synthase 2 (A-2) is recommended for detection of PGE synthase 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


**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 B P-FITC: sc-516140 or m-IgG κ B P-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-29491 or UltraCruz® Hard-set Mounting Medium: sc-359850.


**DATA**

PGE synthase 2 (A-2) sc-514224. Western blot analysis of PGE synthase 2 expression in MOLT-4 (A), Jurkat (B), HeLa (C), SW480 (D), COLO 205 (E) and U-937 (F) whole cell lysates.

**STORAGE**

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

**RESEARCH USE**

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