Prostaglandin E synthase (PGE synthase), also known as PIG12 and MGST1-L1, is a member of the protein super family MAPEG, which consists of membrane-associated proteins involved in eicosanoid and glutathione metabolism. The expression of this membrane-associated protein can be induced by the pro-inflammatory cytokine, IL-1β. PGE synthase is expressed in seminal vesicles, deferent ducts, kidney, heart and spleen. The enzyme activity of PGE synthase in most organs is glutathione-dependent. PGE synthase may play a significant role in the progression of Alzheimer’s disease. Human PGE Synthase is localized to chromosome 9q34.11.

REFERENCES

GENETIC LOCUS
Genetic locus: PTGES (human) mapping to 9q34.11.

SOURCE
PGE synthase (B-6) is a mouse monoclonal antibody raised against amino acids 1-152 representing full length PGE synthase of human origin.

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

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

APPLICATIONS
PGE synthase (B-6) is recommended for detection of PGE synthase of 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PGE synthase siRNA (h): sc-41642, PGE synthase shRNA Plasmid (h): sc-41642-SH and PGE synthase shRNA (h) Lentiviral Particles: sc-41642-V.

Molecular Weight of PGE synthase: 17 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, U-87 MG cell lysate: sc-2411 or SW480 cell lysate: sc-2219.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG HRP: sc-516102 or m-IgG 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.
2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

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