

# TG1019 (H-63): sc-98887

## BACKGROUND

TG1019 is a G protein-coupled receptor that functions as a chemoattractant for eosinophils and neutrophils. TG1019 is expressed in various tissues except the brain, with the highest expression in liver, kidney, peripheral leukocyte, lung and spleen. TG1019 interacts with the protein OXE to form TG1019/OXE, a  $G_{\alpha i/o}$  protein-coupled receptor. Signals from TG1019 are transduced via a  $G_{\alpha i/o}$  protein to PLC/calcium, MEK/ERK and PI3K/Akt pathways. Signal transduction from TG1019 following stimulation with 5-oxo-6E,8Z,11Z,14Z eicosatetraenoic acid (5-oxo-EETE) induces intracellular calcium mobilization and rapid activation of MEK/ERK and PI3K/Akt pathways. TG1019 also may play a role in downregulating cAMP production.

## REFERENCES

- Hosoi, T., et al. 2002. Identification of a novel human eicosanoid receptor coupled to  $G_{i/o}$ . *J. Biol. Chem.* 277: 31459-31465.
- Vrecl, M., et al. 2004. Development of a BRET2 screening assay using  $\beta$ -Arrestin-2 mutants. *J. Biomol. Screen.* 9: 322-333.
- Hosoi, T., et al. 2005. TG1019/OXE, a  $G_{\alpha i/o}$  protein-coupled receptor, mediates 5-oxo-eicosa-tetraenoic acid-induced chemotaxis. *Biochem. Biophys. Res. Commun.* 334: 987-995.
- Jones, C.E. 2005. The OXE receptor: a new therapeutic approach for asthma? *Trends Mol. Med.* 11: 266-270.

## CHROMOSOMAL LOCATION

Genetic locus: OXER1 (human) mapping to 2p21.

## SOURCE

TG1019 (H-63) is a rabbit polyclonal antibody raised against amino acids 361-423 mapping within a C-terminal cytoplasmic domain of TG1019 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

TG1019 (H-63) is recommended for detection of TG1019 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Suitable for use as control antibody for TG1019 siRNA (h): sc-61677, TG1019 shRNA Plasmid (h): sc-61677-SH and TG1019 shRNA (h) Lentiviral Particles: sc-61677-V.

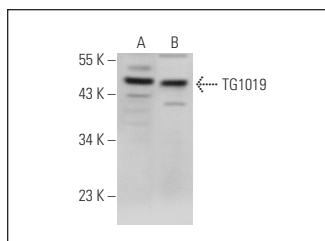
Molecular Weight of TG1019: 46 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



TG1019 (H-63): sc-98887. Western blot analysis of TG1019 expression in HeLa (A) and Hep G2 (B) 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.