



TG1019 (N-12): sc-48682

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

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- Vrecl, M., Jorgensen, R., Pogacnik, A. and Heding, A. 2004. Development of a BRET2 screening assay using β -Arrestin-2 mutants. *J. Biomol. Screen.* 9: 322-333.
- Hosoi, T., Sugikawa, E., Chikada, A., Koguchi, Y. and Ohnuki, T. 2005. TG1019/OXE, a $G_{\alpha i/o}$ protein-coupled receptor, mediates 5-oxo-eicosatetraenoic acid-induced chemotaxis. *Biochem. Biophys. Res. Commun.* 334: 987-995.
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- Powell, W.S. and Rokach, J. 2005. Biochemistry, biology and chemistry of the 5-lipoxygenase product 5-oxo-EETE. *Prog. Lipid Res.* 44: 154-183.

CHROMOSOMAL LOCATION

Genetic locus: GPR126 (human) mapping to 6q24.1; Gpr126 (mouse) mapping to 10 A2.

SOURCE

TG1019 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TG1019 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-48682 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

TG1019 (N-12) is recommended for detection of TG1019 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

Molecular Weight of TG1019: 45.8 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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