

# FKSG80 (T-16): sc-32647

## BACKGROUND

G protein-coupled receptor 81 (FKSG80) belongs to the G protein-coupled receptor 1 family. It is an integral membrane protein which functions as an orphan receptor. The gene encoding the FKSG80 protein, GPR81, maps to chromosome 12q24.31 in humans. The FKSG80 protein is a 347 amino acid protein that shares 70% homology to the chemokine receptor HM74. FKSG80 is expressed mainly in pituitary, but can also be detected in adipose tissue. It is not found in hippocampus, basal forebrain, frontal, temporal and occipital lobes of the cortex, caudate nucleus or nucleus accumbens.

## REFERENCES

1. Lee, D.K., et al. 2001. Discovery and mapping of ten novel G protein-coupled receptor genes. *Gene* 275: 83-91.
2. Wise, A., et al. 2003. Molecular identification of high and low affinity receptors for nicotinic acid. *J. Biol. Chem.* 278: 9869-9874.
3. Abbracchio, M.P., et al. 2003. Characterization of the UDP-glucose receptor (re-named here the P2Y14 receptor) adds diversity to the P2Y receptor family. *Trends Pharmacol. Sci.* 24: 52-55.

## CHROMOSOMAL LOCATION

Genetic locus: GPR81 (human) mapping to 12q24.31; Gpr81 (mouse) mapping to 5 F.

## SOURCE

FKSG80 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of FKSG80 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-32647 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

FKSG80 (T-16) is recommended for detection of FKSG80 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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). FKSG80 (T-16) is also recommended for detection of FKSG80 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FKSG80 siRNA (h): sc-44643, FKSG80 siRNA (m): sc-44644, FKSG80 shRNA Plasmid (h): sc-44643-SH, FKSG80 shRNA Plasmid (m): sc-44644-SH, FKSG80 shRNA (h) Lentiviral Particles: sc-44643-V and FKSG80 shRNA (m) Lentiviral Particles: sc-44644-V.

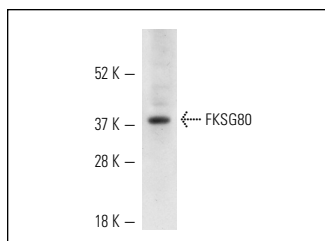
Molecular Weight of FKSG80: 39 kDa.

Positive Controls: T24 cell lysate: sc-2292.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



FKSG80 (T-16): sc-32647. Western blot analysis of FKSG80 expression in T24 whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Álvarez, Z., et al. 2014. Neurogenesis and vascularization of the damaged brain using a lactate-releasing biomimetic scaffold. *Biomaterials* 35: 4769-4781.
2. Wagner, W., et al. 2015. L- and D-lactate enhance DNA repair and modulate the resistance of cervical carcinoma cells to anticancer drugs via histone deacetylase inhibition and hydroxycarboxylic acid receptor 1 activation. *Cell Commun. Signal.* 13: 36.

## 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.