

TAAR4 (R-15): sc-55325

BACKGROUND

Trace amines are endogenous molecules structurally related to classical biogenic amines that are linked to psychiatric conditions. TAAR4 belongs to a family of G protein-coupled receptors, referred to as trace-amine-associated receptors (TAARs), which are activated by trace amines and are present in very low levels in mammalian tissue. TAARs contain several structural features that are similar to the rhodopsin β -adrenergic receptor superfamily, including the positions of the seven-transmembrane regions that provide common ligand-binding pockets as well as the short N- and C-terminal domains. TAAR proteins are potential targets for studying amine-containing drugs of abuse, such as amphetamines and MDMA, as well as neuropsychiatric disorders including schizophrenia, depression and attention deficit disorder.

REFERENCES

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6. Wainscott, D.B., Little, S.P., Yin, T., Tu, Y., Rocco, V.P., He, J.X., Nelson, D.L. 2007. Pharmacologic characterization of the cloned human trace amine-associated receptor 1 (TAAR1) and evidence for species differences with the rat TAAR1. *J. Pharmacol. Exp. Ther.* 320: 475-485.

CHROMOSOMAL LOCATION

Genetic locus: Taar4 (mouse) mapping to 10 A4.

SOURCE

TAAR4 (R-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of TAAR4 of rat 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-55325 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TAAR4 (R-15) is recommended for detection of TAAR4 of mouse and rat 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).

TAAR4 (R-15) is also recommended for detection of TAAR4 in additional species, including equine and bovine.

Suitable for use as control antibody for TAAR4 siRNA (m): sc-63104, TAAR4 shRNA Plasmid (m): sc-63104-SH and TAAR4 shRNA (m) Lentiviral Particles: sc-63104-V.

Molecular Weight of TAAR4: 39 kDa.

Positive Controls: BC₃H1 cell lysate: sc-2299 or EOC 20 whole cell lysate: sc-364187.

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.

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 or our catalog for detailed protocols and support products.