BACKGROUND

AKR1C13 (aldo-keto reductase family 1 member C13) is a 323 amino acid monomeric protein that belongs to the aldo-keto reductase family. Using nicotinamide dinucleotide as a cofactor, proteins belonging to the aldo-keto reductase family catalyze reactions with a diverse range of substrates, including prostaglandins (PGs), monosaccharides, steroids, and xenobiotic aldehydes and ketones. Some members of the aldo-keto reductase family, including AKR1C13, also act as bile acid-binding proteins. The gene that encodes AKR1C13 maps to mouse chromosome 13 A1.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: Akr1c13 (rat) mapping to 17q12.3.

SOURCE

AKR1C13 (V-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of AKR1C13 of rat 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-169944 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

AKR1C13 (V-12) is recommended for detection of AKR1C13 of rat 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); non cross-reactive with other AKR1C family members.

Molecular Weight of AKR1C13: 37 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) 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

DATA 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.