

SDR42E1 (G-13): sc-136710

BACKGROUND

SDR42E1 (short chain dehydrogenase/reductase family 42E, member 1), also known as HSPC105, is a 393 amino acid multi-pass membrane protein that belongs to the 3- β -HSD family. The gene encoding SDR42E1 maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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- Breuning, M.H., et al. 1993. Rubinstein-Taybi syndrome caused by submicroscopic deletions within 16p13.3. *Am. J. Hum. Genet.* 52: 249-254.
- Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. *Nat. Genet.* 26: 370-374.
- Kuhlenbäumer, G., et al. 2002. Giant axonal neuropathy (GAN): case report and two novel mutations in the gigaxonin gene. *Neurology* 58: 1273-1276.
- Mathew, C.G. and Lewis, C.M. 2004. Genetics of inflammatory bowel disease: progress and prospects. *Hum. Mol. Genet.* 13 Spec. No. 1: R161-R168.
- Persson, B., et al. 2009. The SDR (short-chain dehydrogenase/reductase and related enzymes) nomenclature initiative. *Chem. Biol. Interact.* 178: 94-98.

CHROMOSOMAL LOCATION

Genetic locus: SDR42E1 (human) mapping to 16q23.2; Sdr42e1 (mouse) mapping to 8 E1.

SOURCE

SDR42E1 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SDR42E1 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-136710 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

SDR42E1 (G-13) is recommended for detection of SDR42E1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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); non cross-reactive with other HSPC family members.

SDR42E1 (G-13) is also recommended for detection of SDR42E1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for SDR42E1 siRNA (h): sc-93312, SDR42E1 siRNA (m): sc-108949, SDR42E1 shRNA Plasmid (h): sc-93312-SH, SDR42E1 shRNA Plasmid (m): sc-108949-SH, SDR42E1 shRNA (h) Lentiviral Particles: sc-93312-V and SDR42E1 shRNA (m) Lentiviral Particles: sc-108949-V.

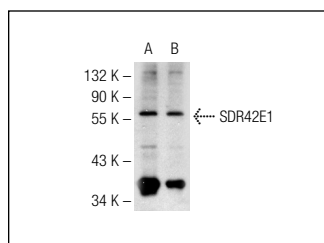
Molecular Weight of SDR42E1: 44 kDa.

Positive Controls: KNRK Whole Cell Lysate : sc-2214 or NRK whole cell lysate.

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



SDR42E1 (G-13): sc-136710. Western blot analysis of SDR42E1 expression in KNRK (A) and NRK (B) whole cell lysates.

PROTOCOLS

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