

OGFOD2 (K-20): sc-243665

BACKGROUND

OGFOD2 (2-oxoglutarate and iron-dependent oxygenase domain-containing protein 2) is a 350 amino acid protein that contains one PKHD (prolyl/lysyl hydroxylase) domain and is able to bind both ascorbate and iron as cofactors. It is suspected that members of the 2-oxoglutarate oxygenase protein family function to catalyze reactions that involve reactive oxidizing species, such as hydroxylations, desaturations and oxidative ring closures. There are four isoforms of OGFOD2 that are produced as a result of alternative splicing events. The gene encoding OGFOD2 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

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CHROMOSOMAL LOCATION

Genetic locus: OGFOD2 (human) mapping to 12q24.31; Ogfod2 (mouse) mapping to 5 F.

SOURCE

OGFOD2 (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of OGFOD2 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-243665 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OGFOD2 (K-20) is recommended for detection of OGFOD2 of mouse, rat and 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); non cross-reactive with OGFOD1.

OGFOD2 (K-20) is also recommended for detection of OGFOD2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for OGFOD2 siRNA (h): sc-96009, OGFOD2 siRNA (m): sc-150185, OGFOD2 shRNA Plasmid (h): sc-96009-SH, OGFOD2 shRNA Plasmid (m): sc-150185-SH, OGFOD2 shRNA (h) Lentiviral Particles: sc-96009-V and OGFOD2 shRNA (m) Lentiviral Particles: sc-150185-V.

Molecular Weight of OGFOD2: 39 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.

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.