BACKGROUND

The 2-oxoglutarate dehydrogenase complex catalyzes the overall conversion of 2-oxoglutarate to succinyl-CoA and CO2. The complex contains multiple copies of three enzymatic components: 2-oxoglutarate dehydrogenase (E1), dihydrolipoamide succinyltransferase (E2) and lipoamide dehydrogenase (E3). DHTKD1 (probable 2-oxoglutarate dehydrogenase E1 component DHTKD1, mitochondrial), also known as KIAA1630 or dehydrogenase E1 and transketolase domain-containing protein 1, is a 919 amino acid protein belonging to the α-ketoglutarate dehydrogenase family. Thiamine pyrophosphate serves as the cofactor for DHTKD1, which is localized to the mitochondrion. The gene encoding DHTKD1 maps to human chromosome 10p14 and mouse chromosome 2 A1.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: DHTKD1 (human) mapping to 10p14; Dhtkd1 (mouse) mapping to 2 A1.

SOURCE

DHTKD1 (F-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 598-637 within an internal region of DHTKD1 of human origin.

STORAGE

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-398620 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

DHTKD1 (F-11) is recommended for detection of DHTKD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for DHTKD1 siRNA (h): sc-90728, DHTKD1 siRNA (m): sc-143036, DHTKD1 shRNA Plasmid (h): sc-90728-SH, DHTKD1 shRNA Plasmid (m): sc-143036-SH, DHTKD1 shRNA (h) Lentiviral Particles: sc-90728-V and DHTKD1 shRNA (m) Lentiviral Particles: sc-143036-V.

Molecular Weight of DHTKD1: 103 kDa.

Positive Controls: human liver extract: sc-363766.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

RESEARCH USE

For research use only, not for use in diagnostic procedures.