**BACKGROUND**

OXA1L (oxidase (cytochrome c) assembly 1-like), also known as OXA1, is a 435 mitochondrial inner membrane protein belonging to the evolutionarily conserved Oxa1/Alb3/YidC protein family. Members of the Oxa1/Alb3/YidC protein family are involved in the biogenesis of membrane proteins in mitochondria, chloroplasts and bacteria. Existing as three isoforms produced by alternative splicing events, OXA1L is required for the insertion of integral membrane proteins into the mitochondrial inner membrane. OXA1L is essential for the activity and assembly of cytochrome oxidase and for the correct biogenesis of F1F0-ATP synthase and NADH:ubiquinone oxidoreductase. Mutations in the gene encoding OXA1L might be involved in the pathology of combined enzymatic deficiencies of the oxidative phosphorylation (OXPHOS) system.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: OXA1L (human) mapping to 14q11.2; Oxa1l (mouse) mapping to 14 C2.

**SOURCE**

OXA1L (A-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 387-413 near the C-terminus of OXA1L of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG2a 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-373881 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

OXA1L (A-6) is recommended for detection of OXA1L 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), immunohistochemistry (including paraffin-embedded sections) (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 OXA1L siRNA (h): sc-92306, OXA1L siRNA (m): sc-151950, OXA1L shRNA Plasmid (h): sc-92306-SH, OXA1L shRNA Plasmid (m): sc-151950-SH, OXA1L shRNA (h) Lentiviral Particles: sc-92306-V and OXA1L shRNA (m) Lentiviral Particles: sc-151950-V.

Molecular Weight of OXA1L: 42 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, PC-3 cell lysate: sc-2220 or HeLa whole cell lysate: sc-2200.

**RECOMMENDED SUPPORT REAGENTS**

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

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

**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.