

Product datasheet for TA306395

SCO1 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IF, IHC, WB

Recommended Dilution: WB: 0.5 - 1 ug/mL, ICC: 2.5 ug/mL, IF: 20 ug/mL

Reactivity: Human, Mouse, Rat

Rabbit Host: Isotype: lgG

Clonality: Polyclonal

Immunogen: SCO1 antibody was raised against a 14 amino acid peptide from near the center of human

SCO1.

Formulation: PBS containing 0.02% sodium azide.

Concentration: 1ug/ul

Purification: Affinity chromatography purified via peptide column

Conjugation: Unconjugated

Store at -20°C as received. Storage:

Stability: Stable for 12 months from date of receipt. Gene Name: SCO1 cytochrome c oxidase assembly protein

Database Link: NP 004580

Entrez Gene 52892 MouseEntrez Gene 497930 RatEntrez Gene 6341 Human

O75880



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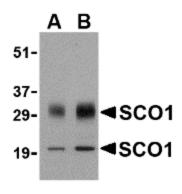


Background:

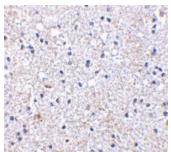
Synthesis of cytochrome c oxidase 1 was initially identified in yeast as one of two cytochrome c oxidase (COX) assembly proteins that enable the assembly of cytochrome c holoenzyme, a complex that catalyzes the transfer of reducing equivalents from cytochrome c to molecular oxygen and pumps protons across the inner mitochondrial membrane. Like their yeast homologs, the function of both SCO1 and SCO2 are dependent on copper ion binding. Mutations in either gene can lead to cytochrome c oxidase respiratory chain defects, with a missense mutation in human SCO1 (P174L) associated with a fatal neonatal hepatopathy when the second allele is also non-functional, suggesting the pathology is due to loss of function. It has been suggested that this mutation alters the SCO1 affinity for the copper (I) ion, thus impairing the efficiency of copper transfer to the cytochrome c oxidase. At least two isoforms of SCO1 are known to exist and both are recognized by the SCO1 antibody. This SCO1 antibody has no cross-reactivity to SCO2.

Synonyms: SCOD1

Product images:

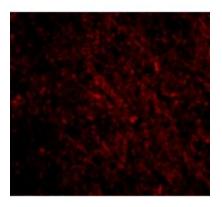


Western blot analysis of SCO1 in human brain tissue lysate with SCO1 antibody at (A) 0.5 and (B) 1 ug/ml.



Immunohistochemistry of SCO1 in human brain tissue with SCO1 antibody at 2.5 ug/ml.





Immunofluorescence of SCO1 in Human Brain cells with SCO1 antibody at 20 ug/mL.