**BACKGROUND**

Caytaxin, also known as ATCAY (ataxia cayman type protein), CLAC or BNIP-H, is a 371 amino acid neuron-restricted protein that exists as 3 alternatively spliced isoforms. Deficiency or mutation of the gene encoding Caytaxin is associated with Cayman ataxia, a recessive congenital ataxia specific to a restricted population on Grand Cayman Island. Symptoms of Cayman ataxia include hypotonia, psychomotor retardation and cerebellar dysfunction, including wide-based ataxic gait, nystagmus, intention tremor and dysarthria. Co-localizing to mitochondria, Caytaxin binds UKHC and contains one CRAL-Trio domain that is used to interact with small lipophilic molecules. As an adaptor protein, Caytaxin regulates transport of mitochondria, and, as observed in RNA interference studies, suppression of Caytaxin leads to mitochondrial redistribution in neurites.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: ATCAY (human) mapping to 19p13.3; Atcay (mouse) mapping to 10 C1.

**SOURCE**

Caytaxin (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Caytaxin of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-65018 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Caytaxin (D-20) is recommended for detection of Caytaxin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

Caytaxin (D-20) is also recommended for detection of Caytaxin in additional species, including canine, bovine, porcine and avian.


Molecular Weight of Caytaxin: 42 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, U-87 MG cell lysate: sc-2411 or Caytaxin (m): 293T Lysate: sc-119044.

**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-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**

Caytaxin (D-20) sc-65018. Western blot analysis of Caytaxin expression in non-transfected 293T: sc-117752 and HepG2 whole cell lysates.

**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.