**BACKGROUND**

KBP (KIF1-binding protein), also known as KIAA1279, is a 621 amino acid mitochondrial protein that is highly expressed in heart, brain, ovary, testis and spinal cord, with lower levels of expression found in most adult tissues. Belonging to the KIF1-binding protein family, KBP may be involved in the regulation of mitochondrial transport by modulating the motor activity of KIF1B. KBP is also required for the organization of axonal microtubules, as well as for the maintenance of axonal growth during peripheral and central nervous system development. The gene encoding KBP maps to human chromosome 10q22.1 and mouse chromosome 10 B4. Defects to the gene encoding KBP has been linked to Goldberg-Shprintzen megacolon syndrome, a neurological disorder characterized by microcephaly, mental retardation and facial dysmorphism.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: KIF1BP (human) mapping to 10q22.1; Kif1bp (mouse) mapping to 10 B4.

**SOURCE**

KBP (H-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 380-394 within an internal region of KBP of human origin.

**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-390449 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

KBP (H-12) is recommended for detection of KBP 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).

KBP (H-12) is also recommended for detection of KBP in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for KBP siRNA (h): sc-90661, KBP siRNA (m): sc-146346-KBP shRNA Plasmid (h): sc-90661-SH, KBP shRNA Plasmid (m): sc-146346-SH, KBP shRNA (h) Lentiviral Particles: sc-90661-V and KBP shRNA (m) Lentiviral Particles: sc-146346-V.

Molecular Weight of KBP: 72 kDa.

Positive Controls: KBP (m3): 293T Lysate: sc-121185.

**RECOMMENDED SUPPORT REAGENTS**

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


**DATA**

**STORAGE**

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

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.