

FKHL18 (G-7): sc-398599

BACKGROUND

The Fox family of transcription factors is a large group of proteins that share a common DNA-binding domain, termed a winged-helix or forkhead domain, and are classified into 20 subclasses. Many Fox proteins play important roles in development, metabolism, cancer and aging. FKHL18, also designated Forkhead box protein S1 (FoxS1) or Forkhead-related transcription factor 10 (FREAC-10), is a structurally unique member of the Fox family. FKHL18 is expressed in aorta, sensory neurons and fetal testis, suggesting diverse functions of the FKHL18 protein. Specifically, FKHL18 is thought to play a role in the integration and processing of neuronal signaling necessary for energy turnover and motor function. It has also been established as an early sensory neuronal marker.

REFERENCES

- Cederberg, A., et al. 1997. Chromosome localization, sequence analysis, and expression pattern identify FKHL 18 as a novel human forkhead gene. *Genomics* 44: 344-346.
- Katoh, M. and Katoh, M. 2004. Human FOX gene family (review). *Int. J. Oncol.* 25: 1495-1500.
- Jonsson, H. and Peng, S.L. 2005. Forkhead transcription factors in immunology. *Cell. Mol. Life Sci.* 62: 397-409.
- Heglin, M., et al. 2005. Lack of the central nervous system- and neural crest-expressed forkhead gene FoxS1 affects motor function and body weight. *Mol. Cell. Biol.* 25: 5616-5625.
- Wotton, K.R. and Shimeld, S.M. 2006. Comparative genomics of vertebrate Fox cluster loci. *BMC Genomics* 7: 271.
- Montelius, A., et al. 2007. Emergence of the sensory nervous system as defined by FoxS1 expression. *Differentiation* 75: 404-417.

CHROMOSOMAL LOCATION

Genetic locus: Foxs1 (mouse) mapping to 2 H1.

SOURCE

FKHL18 (G-7) is a mouse monoclonal antibody raised against amino acids 115-270 mapping within an internal region of FKHL18 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FKHL18 (G-7) is available conjugated to agarose (sc-398599 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398599 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398599 PE), fluorescein (sc-398599 FITC), Alexa Fluor® 488 (sc-398599 AF488), Alexa Fluor® 546 (sc-398599 AF546), Alexa Fluor® 594 (sc-398599 AF594) or Alexa Fluor® 647 (sc-398599 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398599 AF680) or Alexa Fluor® 790 (sc-398599 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FKHL18 (G-7) is recommended for detection of FKHL18 of mouse and rat 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 FKHL18 siRNA (m): sc-145195, FKHL18 shRNA Plasmid (m): sc-145195-SH and FKHL18 shRNA (m) Lentiviral Particles: sc-145195-V.

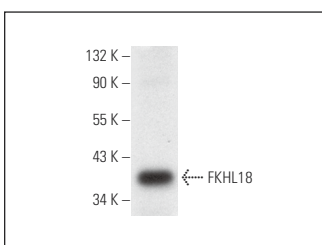
Molecular Weight of FKHL18: 35 kDa.

Positive Controls: A-10 cell lysate: sc-3806 or C2C12 whole cell lysate: sc-364188.

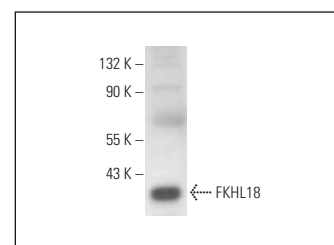
RECOMMENDED SUPPORT REAGENTS

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, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



FKHL18 (G-7): sc-398599. Western blot analysis of FKHL18 expression in A-10 whole cell lysate.



FKHL18 (G-7): sc-398599. Western blot analysis of FKHL18 expression in C2C12 whole cell lysate.

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.

PROTOCOLS

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