

KIBRA (B-3): sc-518263

BACKGROUND

KIBRA (kidney and brain protein), also known as WWC1 (WW and C2 domain containing 1) or HBEBP3, is a 1,113 amino acid protein that localizes to the cytoplasm and contains one C2 domain and two WW domains. Expressed in colon, brain, kidney and heart tissue, KIBRA is thought to interact with dendrin and, via this interaction, may play a role in collagen-induced signaling. Additionally, KIBRA, which exists as multiple alternatively spliced isoforms, is involved in memory performance and in the pathogenesis of Alzheimer's disease. The gene encoding KIBRA maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

1. Kremerskothen, J., et al. 2003. Characterization of KIBRA, a novel WW domain-containing protein. *Biochem. Biophys. Res. Commun.* 300: 862-867.
2. Büther, K., et al. 2004. KIBRA is a novel substrate for protein kinase C ζ . *Biochem. Biophys. Res. Commun.* 317: 703-707.
3. Rayala, S.K., et al. 2006. Essential role of KIBRA in co-activator function of dynein light chain 1 in mammalian cells. *J. Biol. Chem.* 281: 19092-19099.
4. Papassotiropoulos, A., et al. 2006. Common Kibra alleles are associated with human memory performance. *Science* 314: 475-478.
5. Hilton, H.N., et al. 2008. KIBRA interacts with discoidin domain receptor 1 to modulate collagen-induced signalling. *Biochim. Biophys. Acta* 1783: 383-393.
6. Schaper, K., et al. 2008. KIBRA gene variants are associated with episodic memory in healthy elderly. *Neurobiol. Aging* 29: 1123-1125.

CHROMOSOMAL LOCATION

Genetic locus: WWC1 (human) mapping to 5q34.

SOURCE

KIBRA (B-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1017-1042 of KIBRA of human origin.

PRODUCT

Each vial contains 200 μ g IgG κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

KIBRA (B-3) is available conjugated to agarose (sc-518263 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518263 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518263 PE), fluorescein (sc-518263 FITC), Alexa Fluor[®] 488 (sc-518263 AF488), Alexa Fluor[®] 546 (sc-518263 AF546), Alexa Fluor[®] 594 (sc-518263 AF594) or Alexa Fluor[®] 647 (sc-518263 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-518263 AF680) or Alexa Fluor[®] 790 (sc-518263 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

KIBRA (B-3) is recommended for detection of KIBRA of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 KIBRA siRNA (h): sc-91969, KIBRA shRNA Plasmid (h): sc-91969-SH and KIBRA shRNA (h) Lentiviral Particles: sc-91969-V.

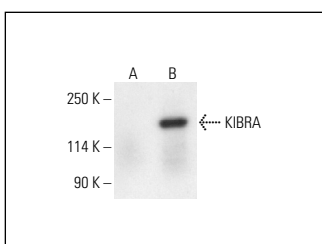
Molecular Weight of KIBRA: 125 kDa.

Positive Controls: KIBRA (h): 293T Lysate: sc-372293.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



KIBRA (B-3): sc-518263. Western blot analysis of KIBRA expression in non-transfected: sc-117752 (A) and human KIBRA transfected: sc-372293 (B) 293T whole cell lysates. Detection reagent used: m-IgG κ BP-HRP: sc-525408.

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.