

International Office

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Research Use Only. Not for diagnostic or therapeutic use.

EB05492-T - Goat Anti-Kinesin 1 / UKHC Antibody

Size: 20µg specific antibody in 40µl

Target Protein

Principal Names: KIF5B, UKHC, kinesin 1 (110-120kD), kinesin family member 5B, KNS, KINH, KNS1, U-KHC, kinesin heavy chain Official Symbol: KIF5B Accession Number(s): NP_004512.1 Human GeneID(s): <u>3799</u>

Immunogen

Peptide with sequence C-QPVAVRGGGGKQV, from the C Terminus of the protein sequence according to NP_004512.1.

Please note the peptide is available for sale.

Purification and Storage

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Aliquot and store at -20°C. Minimize freezing and thawing.

Applications Tested

Peptide ELISA: antibody detection limit dilution 1:8000.

Western blot: Approx 110kDa band observed in lysates of the cell lines Jurkat and HeLa (calculated MW of 110kDa according to NP_004512.1). Recommended concentration: 0.5-1.5µg/ml. Primary incubation was 1 hour. This antibody has been successfully used in WB on Human: Connell et al. (2019) PMID: 31587092.

Additional validation: This antibody has been successfully used in the following paper: Sikorski et al. (2018) PMID: 30377371. Immunofluorescence: This antibody has been successfully used in IF on Human: Connell et al. (2019) PMID: 31587092.

Species Reactivity

Tested: Human Expected from sequence similarity: Human, Mouse, Rat, Dog, Cow

Specific References

This antibody has been successfully used in WB and IF on Human: James W. Connell, Rachel J. Allison, Catherine E. Rodger, Guy Pearson, Eliska Zlamalova, Evan Reid ESCRTIIIII associated proteins and spastin inhibit protrudin dependent polarised membrane traffic Cell Mol Life Sci. 2019 Oct 5. doi: 10.1007/s00018-019-03313-z PMID: 31587092 This antibody has been successfully used in the following paper:

Ringer K, Riehl J, Müller M, Dewes J, Hoff F, Jacob R The large GTPase Mx1 binds Kif5B for cargo transport along microtubules. Traffic. 2018 Dec;19(12):947-964. PMID: 30246279

This antibody has been successfully used in the following paper:

Krzysztof Sikorski, Adi Mehta, Marit Inngjerdingen, Flourina Thakor, Simon Kling, Tomas Kalina, Tuula A. Nyman, Maria Ekman Stensland, Wei Zhou, Gustavo A. De Souza, Lars Holden, Jan Stuchly, Markus Templin and Fridtjof Lund-Johansen A high-throughput pipeline for validation of antibodies Nat Methods. 2018 Nov;15(11):909-912 PMID: 30377371

This antibody (previous batch) has been successfully used in WB on Mouse:

Robinson CL, Evans RD, Briggs DA, Ramalho JS, Hume AN. Deficiency in kinesin-1 recruitment to melanosomes precludes it from facilitating their centrifugal transport. J Cell Sci. 2017 May 10. pii: jcs.186064. PMID: 28490438

This antibody (previous batch) has been successfully used in WB:

Diefenbach RJ, Davis A, Miranda-Saksena M, Fernandez MA, Kelly BJ, Jones CA, LaVail JH, Xue J, Lai J, Cunningham AL The Basic Domain of Herpes Simplex Virus 1 pUS9 Recruits Kinesin- 1 To Facilitate Egress from Neurons J Virol. 2015 Dec 9;90(4):2102-11 PMID: 26656703

This antibody (previous batch) has been successfully used in the following paper: Astanina K, Jacob R.

KIF5C, a kinesin motor involved in apical trafficking of MDCK cells. Cell Mol Life Sci. 2010 Apr;67(8):1331-42. PMID: 20094756

This antibody (previous batch) has been successfully used in IF on Human:

Gupta V, Palmer KJ, Spence P, Hudson A, Stephens DJ. Kinesin-1 (uKHC/KIF5B) is required for bidirectional motility of ER exit sites and efficient ER-to-Golgi transport. Traffic. 2008 Nov;9(11):1850-66. PMID: 18817524

