

International Office

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EB06237 - Goat Anti-KPNA3 / IPOA4 Antibody

Size: 100µg specific antibody in 200µl



Target Protein

Principal Names: KPNA3, IPOA4, karyopherin alpha 3 (importin alpha 4), RP11-432M24.3, SRP1gamma, SRP4, hSRP1, importin alpha 4, importin alpha-Q2, karyopherin alpha 3, SRP1, importin alpha-3 Official Symbol: KPNA3 Accession Number(s): NP_002258.2 Human GeneID(s): <u>3839</u> Non-Human GeneID(s): 16648 (mouse)

Immunogen

Peptide with sequence C-DPTANLQTKEFNF, from the C Terminus of the protein sequence according to NP_002258.2.

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 1:128000.

Western blot: Approx. 60kDa band observed in lysates of cell lines CaCo-2, HEK293 and MCF7 (calculated MW of 57.8kDa according to NP_002258.2). Recommended concentration: 0.01-0.03µg/ml. Primary incubation 1 hour at room temperature. **IHC:** Paraffin embedded Human Testis. Recommended concentration: 6µg/ml.

Immunofluorescence: Strong expression of the protein seen in the cytoplasm and nuclei of A431 cells. Recommended concentration: 10µg/ml.

Flow Cytometry: Flow cytometric analysis of A431 cells. Recommended concentration: 10ug/ml.

Species Reactivity

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

Specific References

This antibody has been successfully used in the following paper:

Sadequl Islam, Yang Sun, Yuan Gao, Tomohisa Nakamura, Arshad Ali Noorani, Tong Li, Philip C Wong, Noriyuki Kimura, Etsuro Matsubara, Kensaku Kasuga, Takeshi Ikeuchi, Taisuke Tomita, Kun Zou, Makoto Michikawa

Presenilin Is Essential for ApoE Secretion, a Novel Role of Presenilin Involved in Alzheimer's Disease Pathogenesis.

J Neurosci. 2022 Feb 23;42(8):1574-1586.

PMID: 34987110

This antibody (previous batch) 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 on Mouse:

Ana Jovi**III**, Jerome Mertens, Steven Boeynaems, Elke Bogaert, Noori Chai, Shizuka B. Yamada, Joseph W. Paul III, Shuying Sun, Joseph R. Herdy, Gregor Bieri, Nicholas J. Kramer, Fred H. Gage, Ludo Van Den Bosch, Wim Robberecht, and Aaron D. Gitler. Modifiers of C9orf72 dipeptide repeat toxicity connect nucleocytoplasmic transport defects to FTD/ALS.

Nat Neurosci. 2015 Sep;18(9). PMID: 26308983

This antibody (previous batch) has been successfully used in ICC on Rat:

Ohara R, Hata K, Yasuhara N, Mehmood R, Yoneda Y, Nakagawa M, Yamashita T. Axotomy induces axonogenesis in hippocampal neurons by a mechanism dependent on importin β .

Biochem Biophys Res Commun. 2011 Feb 25;405(4):697-702. PMID: 21291862

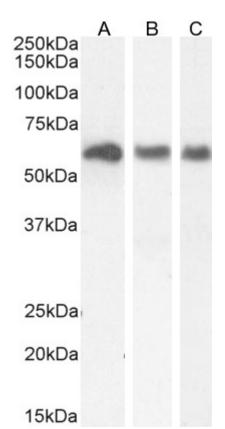
This antibody (previous batch) has been successfully used in WB on Human and Mouse, and in IP on Mouse:

Huenniger K, Krämer A, Soom M, Chang I, Köhler M, Depping R, Kehlenbach RH, Kaether C.

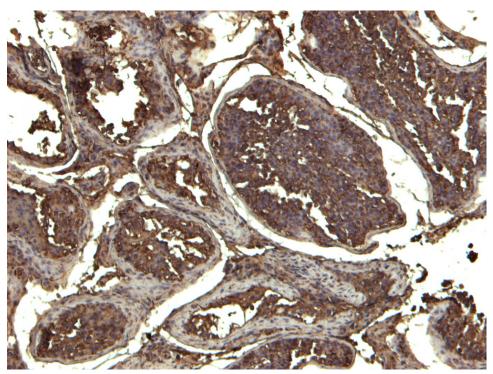
Notch1 signaling is mediated by importins alpha 3, 4, and 7.

Cell Mol Life Sci. 2010 Sep;67(18):3187-96.

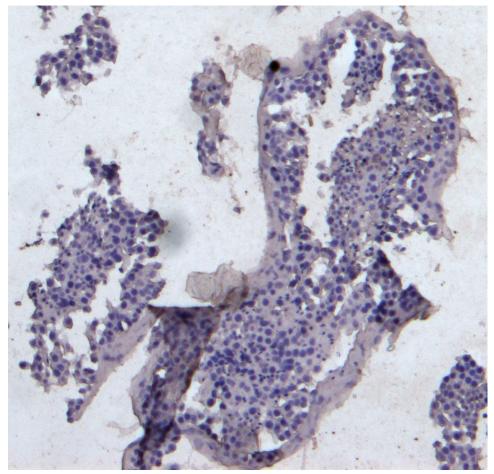
PMID: 20454918



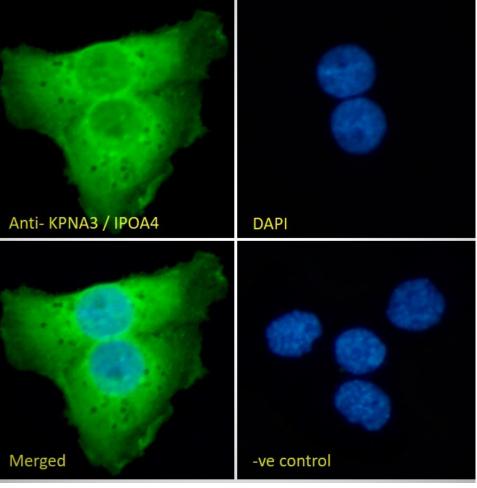
EB06237 (0.03µg/ml) staining of CaCo-2 (A) and HEK293 (B), and (0.01µg/ml) MCF7 (C), cell lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



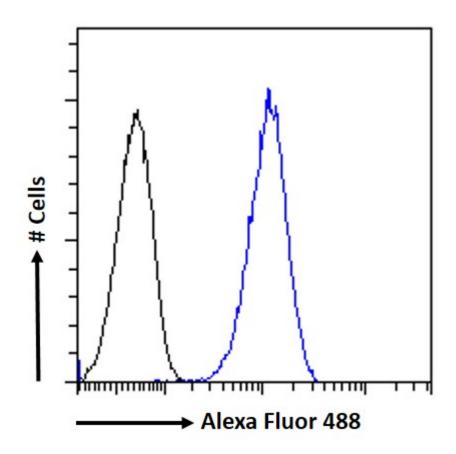
EB06237 (6µg/ml) staining of paraffin embedded Human Testis. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



EB06237 Negative Control showing staining of paraffin embedded Human Testis, with no primary antibody.



EB06237 Immunofluorescence analysis of paraformaldehyde fixed A431 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic and nuclear staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).



EB06237 Flow cytometric analysis of paraformaldehyde fixed A431 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.