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# EB06233 - Goat Anti-KPNA2 / IPOA1 Antibody

Size: 100µg specific antibody in 200µl



## **Target Protein**

**Principal Names:** KPNA2, IPOA1, RCH1, SRP1alpha, karyopherin alpha 2 (RAG cohort 1, importin alpha 1), RAG cohort 1, importin alpha 1, importin alpha 2, importin-alpha-P1, karyopherin subunit alpha-2, pendulin, importin subunit alpha-2, QIP2, RAG cohort protein 1, SRP1-alpha **Official Symbol:** KPNA2

Accession Number(s): NP\_002257.1 Human GeneID(s): <u>3838</u> Non-Human GeneID(s): 16647 (mouse), 85245 (rat)

#### Immunogen

Peptide with sequence C-QVQDGAPGTFNF, from the C Terminus of the protein sequence according to NP\_002257.1.

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 1:32000.

**Western blot:** Approx 55kDa band observed in lysates of cell lines CaCo-2, Jurkat, and KNRK, and approx. 58kDa in lysates of cell lines MCF7 and A549 (calculated MW of 57.9kDa according to Human NP\_002257.1 and Rat NP\_001257731.1). Recommended concentration 0.03-0.1µg/ml. Primary incubation 1 hour at room temperature. **IHC:** Paraffin embedded Human Testis. Recommended concentration: 5µg/ml.

**Immunofluorescence:** Strong expression of the protein seen in U2OS and A549 cells. Recommended concentration: 10µg/ml.

**Flow Cytometry:** Flow cytometric analysis of A549 cells. Recommended concentration: 10ug/ml.

#### **Species Reactivity**

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

#### **Specific References**

# This antibody (previous batch) has been successfully used in Western blot on Mouse:

Ma KL, Song LK, Yuan YH, Zhang Y, Han N, Gao K, Chen NH The nuclear accumulation of alpha-synuclein is mediated by importin alpha and promotes neurotoxi Neuropharmacology. 2014 Jul;82:132-42 PMID: 23973294

#### This antibody has been successfully used in the following paper:

Fujimoto H, Ikuta T, Koike A and Koike M Acetylation of nuclear localization signal controls importin-mediated nuclear transport of Ku70 https://doi.org/10.1101/403485 (August 29, 2018) PMID: 0 EB06233 (0.1µg/ml) staining of Jurkat (A) and CaCo-2 (B) and (0.03ug/ml) A549 (C), MCF7 (D) and KNRK (E) cell lysate. (35µg protein in RIPA buffer). Detected by chemiluminescence.

EB06233 (5µg/ml) staining of paraffin embedded Human Testis. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

EB06233 Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic and ER/Golgi staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).

EB06233 Immunofluorescence analysis of paraformaldehyde fixed A549 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).

EB06233 Flow cytometric analysis of paraformaldehyde fixed A549 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.