



## UK Office

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**Research Use Only. Not for  
diagnostic or therapeutic use.**

## EB09785 - Goat Anti-KCNN4 / KCa3.1 Antibody

Size: 100µg specific antibody in 200µl



### Target Protein

**Principal Names:** hKCa1, hKCa4, hSK4, IK1, IKCA1, intermediate conductance calcium-activated potassium channel protein 1, KCa3.1, KCA4, potassium intermediate/small conductance calcium-activated channel, subfamily N, member 4, putative erythrocyte intermediate, SK4, KCNN4

**Official Symbol:** KCNN4

**Accession Number(s):** NP\_002241.1

**Human GeneID(s):** [3783](#)

**Non-Human GeneID(s):** 16534 (mouse), 65206 (rat)

### Immunogen

Peptide with sequence C-ERQAVNATGHLSD, from the internal region of the protein sequence according to NP\_002241.1.

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 1:16000.

**Western blot:** Approx 50kDa band observed in Human Cerebellum lysates and in lysates of cell line NIH3T3 (calculated MW of 47.7kDa, according to Human NP\_002241.1 and Mouse NP\_032459.3). An additional band of unknown identity was also consistently observed at 35kDa in Cerebellum. This band was successfully blocked by incubation with the immunising peptide. Recommended concentration: 0.1-0.3µg/ml. Primary incubation 1 hour at room temperature. **Negative Control:** Human Adrenal Gland lysate.

**IHC:** Paraffin embedded Human Adrenal Gland, Kidney and Liver. Recommended concentration: 3.75µg/ml.

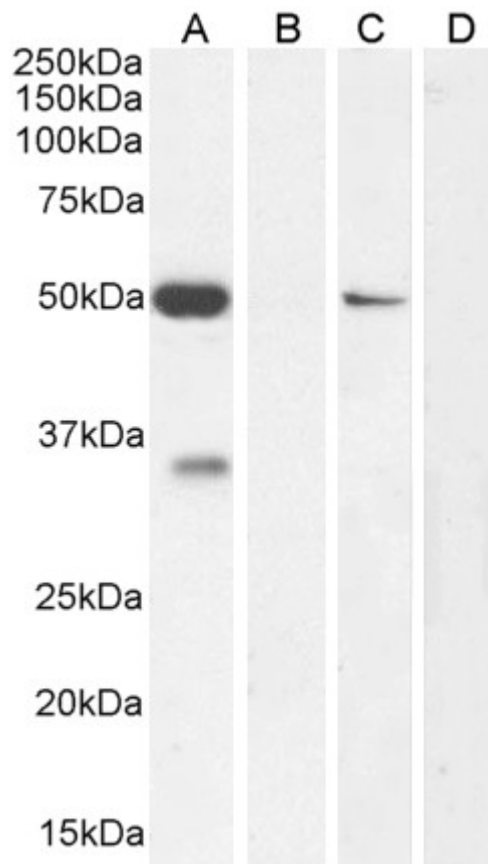
**Immunofluorescence:** Strong expression of the protein seen in the cytoplasm/membranes of HeLa cells. Recommended concentration: 10µg/ml.

**Flow Cytometry:** Flow cytometric analysis of HEK293 cells. Recommended concentration: 10ug/ml.

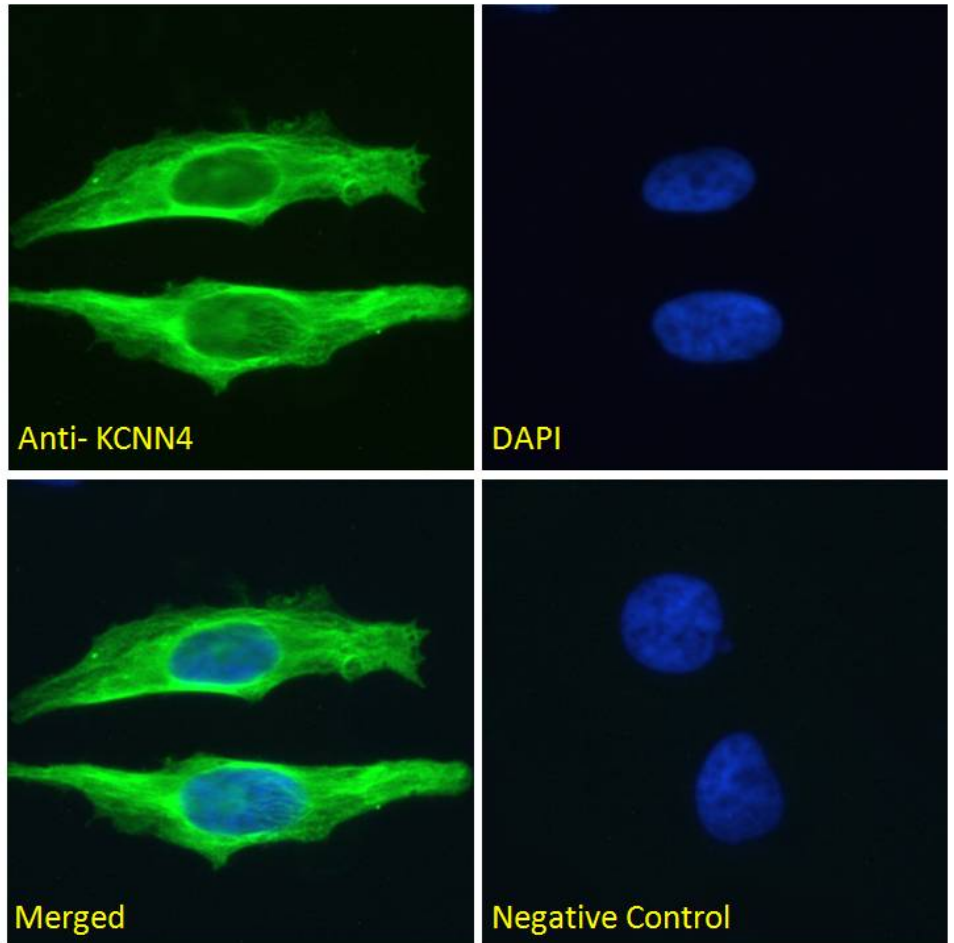
### Species Reactivity

**Tested:** Human, Mouse

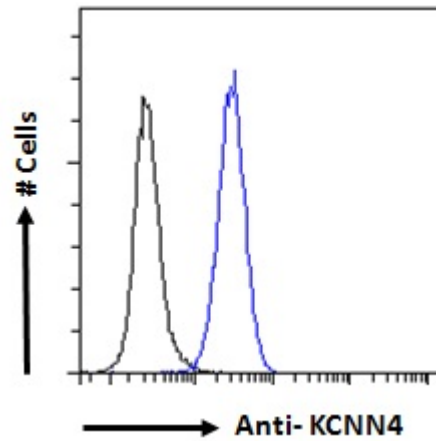
**Expected from sequence similarity:** Human, Mouse, Rat, Dog



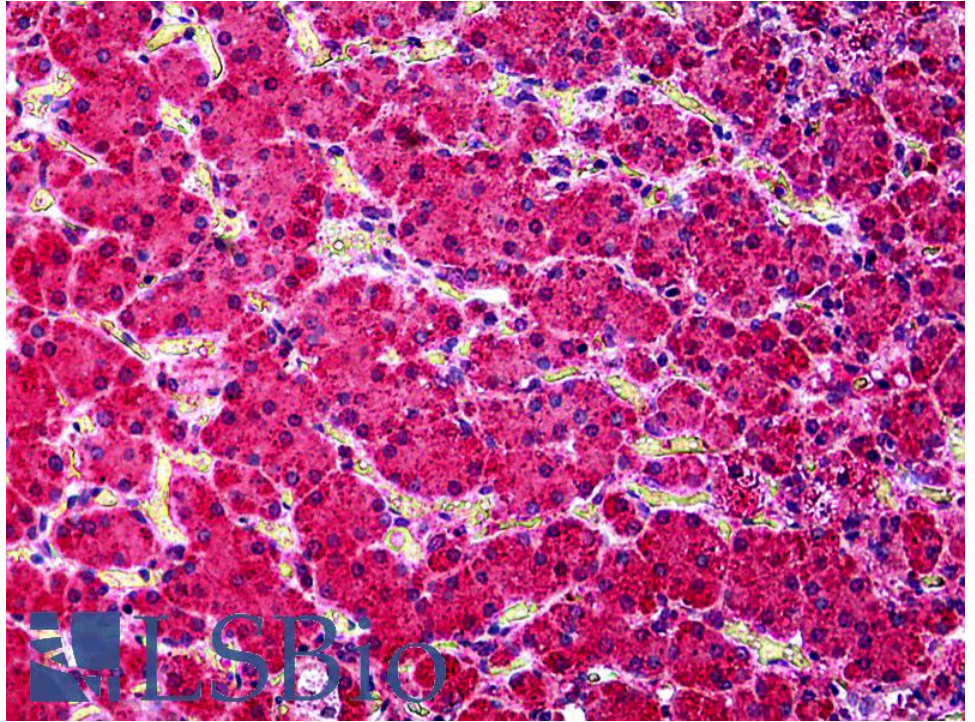
EB09785 (0.1  $\mu\text{g/ml}$ ) staining of Human Cerebellum (A) + Peptide (B), NIH3T3 (C) and negative Control Adrenal Gland (D) lysate (35  $\mu\text{g}$  protein in RIPA buffer). Detected by chemiluminescence.



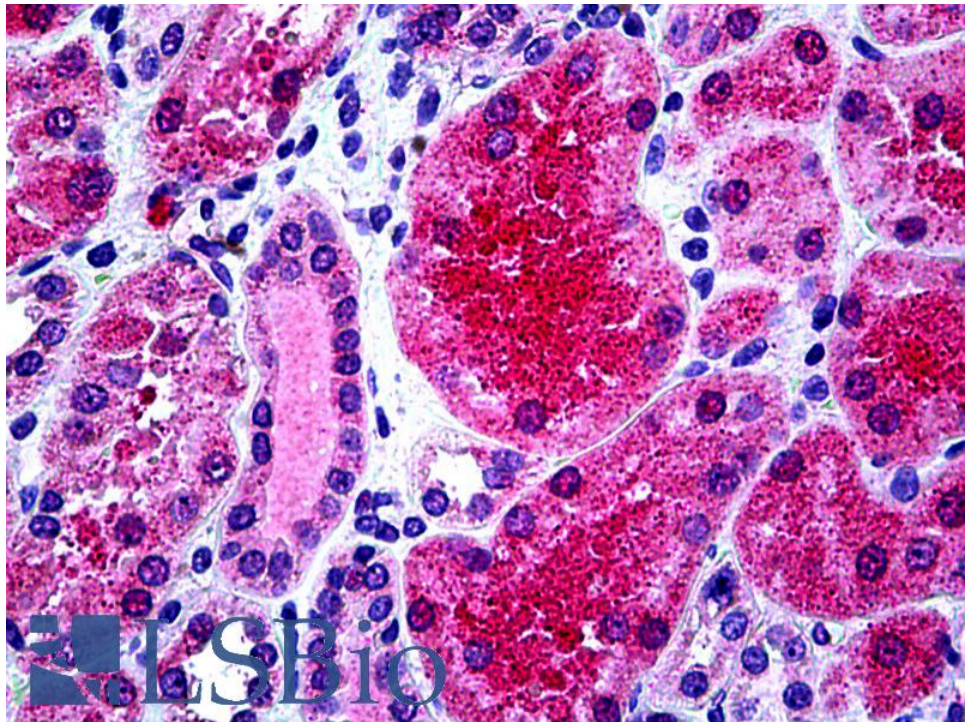
EB09785 Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing membrane/cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).



EB09785 Flow cytometric analysis of paraformaldehyde fixed HEK293 cells (blue line), permeabilized with 0.5% Triton. Primary incubation overnight at 4°C (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.

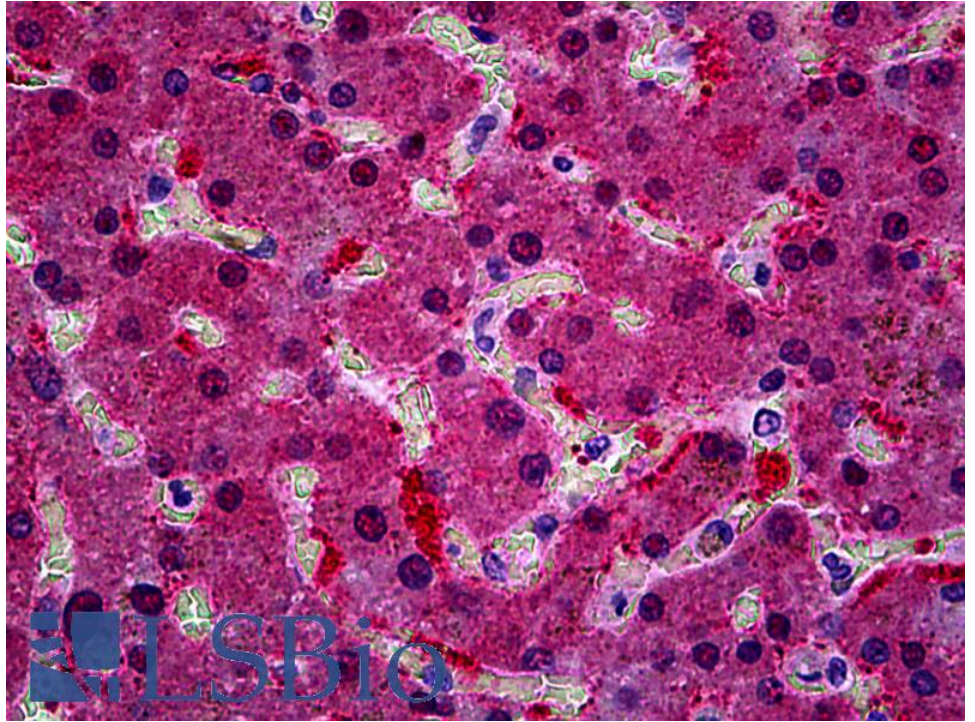


EB09785 (3.75µg/ml) staining of paraffin embedded Human Adrenal Gland. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



EB09785 (3.75µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.





EB09785 (3.75µg/ml) staining of paraffin embedded Human Liver. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.