

Anti-ELKS Antibody

HA500376



Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IF-Cell
Molecular Wt:	Predicted band size: 128 kDa

Description: ELKS/RAB6-interacting/CAST family member 1 is a protein that in humans is encoded by the ERC1 gene. The name ELKS is derived from "protein rich in the amino acids E, L, K and S". The protein encoded by this gene is a member of a family of RIM-binding proteins. RIMs are active zone proteins that regulate neurotransmitter release. This gene has been found fused to the receptor-type tyrosine kinase gene RET by gene rearrangement due to the translocation t(10;12)(q11;p13). Multiple transcript variants encoding different isoforms have been found for this gene. ELKS has been reported to direct vesicles with RAB6A to melanosomes. Regulatory subunit of the IKK complex. Probably recruits I κ B α /NF κ BIA to the complex. May be involved in the organization of the cytomatrix at the nerve terminals active zone (CAZ) which regulates neurotransmitter release. May be involved in vesicle trafficking at the CAZ. May be involved in Rab-6 regulated endosomes to Golgi transport. Widely expressed. Isoform 2 and isoform 4 are abundantly expressed in brain. Isoform 1 and isoform 3 are predominantly expressed in testis and thyroid, and isoform 1 predominates in other tissues tested.

Immunogen: Recombinant protein within human ELKS aa 850-1,116.

Positive control: Hela cell lysate, 293 cell lysate, NIH/3T3 cell lysate, rat testis tissue, human liver tissue, human kidney tissue, human placenta tissue, mouse large intestine tissue, A375, SiHa.

Subcellular location: Cytoplasm, cytoskeleton, microtubule organizing center, centrosomem, Cytoplasm, Membrane, Golgi apparatus membrane, Cell junction, synapse, presynaptic cell membrane.

Database links: SwissProt: Q8IUD2 Human | Q99M11 Mouse | Q811U3 Rat

Recommended Dilutions:

WB	1:500
IHC-P	1:800
IF-Cell	1:200

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Immunogen affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

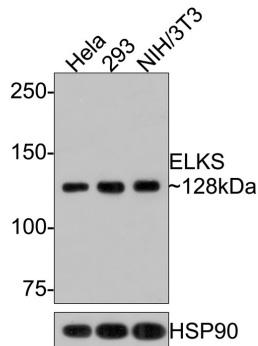
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Images

Fig1: Western blot analysis of ELKS on different lysates with Rabbit anti-ELKS antibody (HA500376) at 1/500 dilution.

Lane 1: HeLa cell lysate
Lane 2: 293 cell lysate
Lane 3: NIH/3T3 cell lysate



Lysates/proteins at 10 µg/Lane.

Predicted band size: 128 kDa
Observed band size: 128 kDa

Exposure time: 1 minute;
6% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA500376) at 1/500 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:300,000 dilution was used for 1 hour at room temperature.

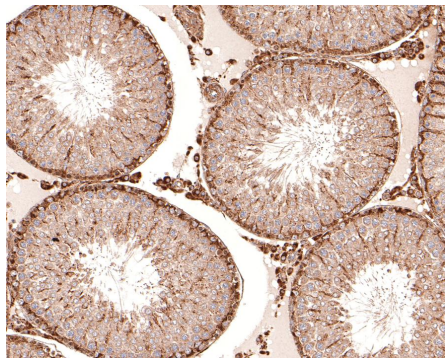


Fig2: Immunohistochemical analysis of paraffin-embedded rat testis tissue with Rabbit anti-ELKS antibody (HA500376) at 1/800 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA500376) at 1/800 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

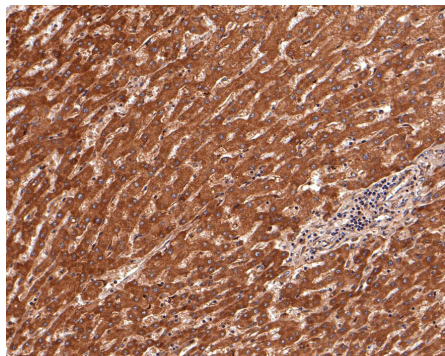


Fig3: Immunohistochemical analysis of paraffin-embedded human liver tissue with Rabbit anti-ELKS antibody (HA500376) at 1/800 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA500376) at 1/800 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

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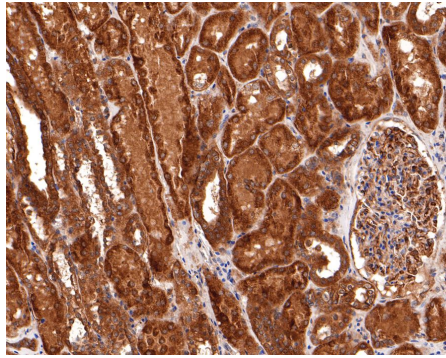


Fig4: Immunohistochemical analysis of paraffin-embedded human kidney tissue with Rabbit anti-ELKS antibody (HA500376) at 1/800 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA500376) at 1/800 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

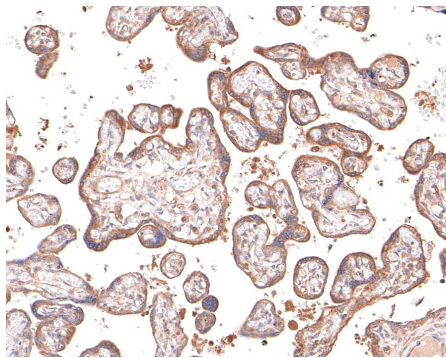


Fig5: Immunohistochemical analysis of paraffin-embedded human placenta tissue with Rabbit anti-ELKS antibody (HA500376) at 1/800 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA500376) at 1/800 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

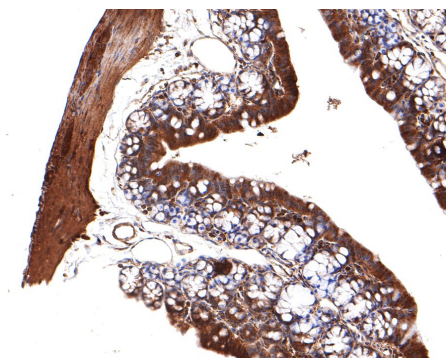


Fig6: Immunohistochemical analysis of paraffin-embedded mouse large intestine tissue with Rabbit anti-ELKS antibody (HA500376) at 1/800 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA500376) at 1/800 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

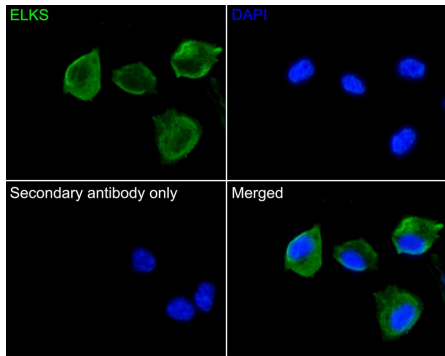


Fig7: Immunocytochemistry analysis of A375 cells labeling ELKS with Rabbit anti-ELKS antibody (HA500376) at 1/200 dilution.

Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 °C, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-ELKS antibody (HA500376) at 1/200 dilution in 2% negative goat serum overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

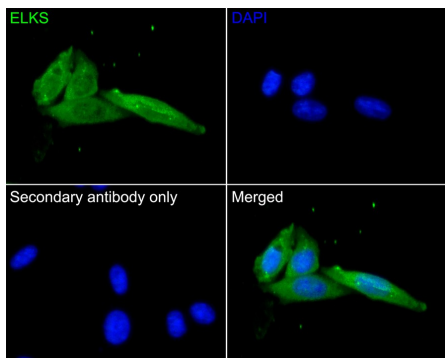


Fig8: Immunocytochemistry analysis of SiHa cells labeling ELKS with Rabbit anti-ELKS antibody (HA500376) at 1/200 dilution.

Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 °C, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-ELKS antibody (HA500376) at 1/200 dilution in 2% negative goat serum overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Ducut Sigala J.L., Bottero V., Young D.B., Shevchenko A., Mercurio F., Verma I.M. Activation of transcription factor NF-kappaB requires ELKS, an IkappaB kinase regulatory subunit. *Science* 304:1963-1967(2004).
2. Nakata T., Yokota T., Emi M., Minami S. Differential expression of multiple isoforms of the ELKS mRNAs involved in a papillary thyroid carcinoma. *Genes Chromosomes Cancer* 35:30-37(2002).

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