



Rabbit Anti-ERC1 antibody

SL11344R

Product Name:	ERC1
Chinese Name:	RAB6蛋白抗体
Alias:	Cast 2; CAST2; CAZ-associated structural protein 2; Elks; ELKS/RAB6 interacting/CAST family member 1; ERC 1; ERC protein 1; ERC1 protein; KIAA1081; MGC12974; RAB6 interacting protein 2; RAB6IP2; RB6I2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	128kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ERC1:751-850/1116
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20℃. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.
PubMed:	PubMed
Product Detail:	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. [provided by RefSeq, Jul 2008].

Function:

Regulatory subunit of the IKK complex. Probably recruits IkappaBalpha/NFKBIA 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. The protein 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). Five transcript variants encoding different isoforms have been found for this gene.

Subunit:

Part of a complex with CHUK, IKBKB and IKBKG. Interacts with CHUK, IKBKB and IKBKG. The interaction with IKBKG is independent of CHUK and IKBKB. Interacts with NFKBIA. Isoform 4 interacts with PPFIA1, and through its C-terminus with the PDZ domains of RIMS1 and RIMS2. Interacts with ERC2/CAST1. Interacts with the GTB-bound forms of RAB6A isoform 1 and isoform 2 and with RAB6B. The interaction was strongest with RAB6B, followed by RAB6A isoform 2 and weakest with RAB6A isoform 1 (By similarity).

Subcellular Location:

Cytoplasmic. Membrane; peripheral membrane protein. Golgi apparatus; Golgi apparatus membrane; peripheral membrane protein.

Tissue Specificity:

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.

DISEASE:

Defects in ERC1 are a cause of thyroid papillary carcinoma (TPC) [MIM:188550]. TPC is a common tumor of the thyroid that typically arises as an irregular, solid or cystic mass from otherwise normal thyroid tissue. Papillary carcinomas are malignant neoplasm characterized by the formation of numerous, irregular, finger-like projections of fibrous stroma that is covered with a surface layer of neoplastic epithelial cells. Note=A chromosomal aberration involving ERC1/RAB6IP2 is found in cause of thyroid papillary carcinomas. Translocation t(10;12)(q11;p13) involving RET. In vitro, isoform 1, isoform 3 and isoform 5 participating in a ERC1-RET fusion protein activate tyrosine-protein kinase activity.

Similarity:

Contains 1 FIP-RBD domain.

SWISS:

Q8IUD2

Gene ID:
23085

Database links:

[Entrez Gene: 23085](#)Human

[Entrez Gene: 111173](#)Mouse

[Entrez Gene: 266806](#)Rat

[Omir: 607127](#)Human

[SwissProt: Q8IUD2](#)Human

[SwissProt: Q99MI1](#)Mouse

[SwissProt: Q811U3](#)Rat

[Unigene: 601216](#)Human

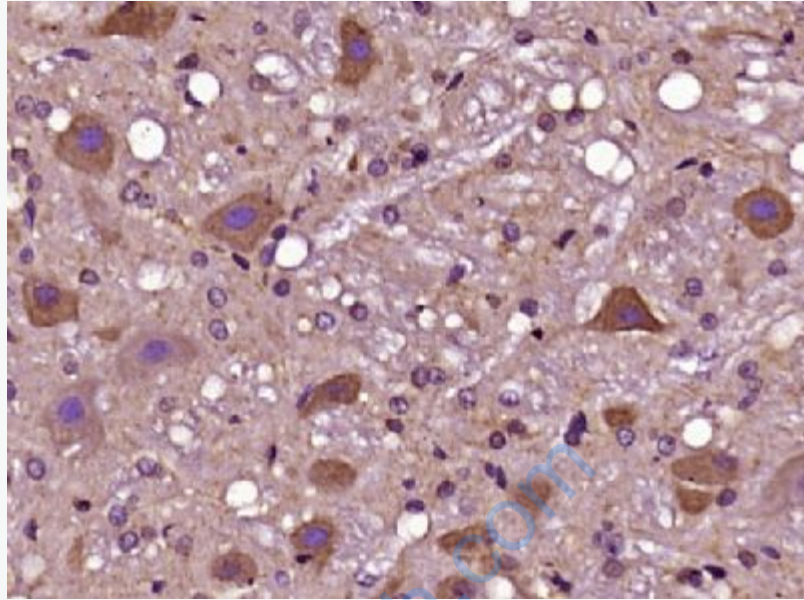
[Unigene: 288860](#)Mouse

[Unigene: 446801](#)Mouse

[Unigene: 207836](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ERC1) Polyclonal Antibody, Unconjugated (SL11344R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.