

Rabbit Anti-CROCC antibody

SL14066R

Product Name:	CROCC
Chinese Name:	睫状神经根卷曲螺旋蛋白抗体
Alias:	ciliary rootlet coiled coil; Ciliary rootlet coiled-coil protein; Crocc; CROCC_HUMAN;
	KIAA0445; Rootletin.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Cow, Horse,
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:	228kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CROCC:1851-2017/2017
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 °C 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°C. 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 °C.
PubMed:	<u>PubMed</u>
Product Detail:	CROCC is a 2017 amino acid protein that forms centriole-associated fibrous structures
	and is an essential component of the ciliary rootlet. Localized to basal bodies and
	centrosomes in ciliated and nonciliated cells, respectively, Rootletin associates with the
	proximal ends of basal bodies and, in photoreceptors, functions to form elongated
	polymers between them. Rootletin is required for centrosome cohesion and, through
	interaction with C-Nap1 (a centrosomal protein present at the ends of the centrioles),

can regulate the linkage of centrioles to basal bodies. Rootletin exists as a homopolymer whose association with centrosomes can be regulated via phosphorylation by Nek2 (NIMA-related kinase 2). Two isoforms exist due to alternative splicing events.

Function:

Major structural component of the ciliary rootlet, a cytoskeletal-like structure in ciliated cells which originates from the basal body at the proximal end of a cilium and extends proximally toward the cell nucleus. Contributes to centrosome cohesion before mitosis.

Post-translational modifications:

Phosphorylated by NEK2 which may regulate its association with centrosomes. Phosphorylated upon DNA damage, probably by ATM or ATR.

DISEASE:

Cytoplasm; cytoskeleton; centrosome; centriole. In ciliated cells, associated with ciliary rootlets. In non-ciliated cells, localized between, around and at the proximal ends of the centrioles. Dissociates from the centrioles at the onset of mitosis and reassociates with them at anaphase.

Similarity:

Belongs to the rootletin family.

SWISS: O5TZA2

Gene ID: 9696

Database links:

Entrez Gene: 9696 Human

SwissProt: Q5TZA2 Human

Unigene: 309403 Human

Important Note:

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