SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-Centrin 2/Cy5 Conjugated antibody

SL13849R-Cy5

Product Name	Anti-Centrin 2/Cy5
Chinese Name	Cy5 标记的中心体蛋白 2 抗体
Alias	20kD calcium binding protein; CALT; caltractin; Caltractin isoform 1; CEN2; centrin; centrin, EF hand protein, 2; Centrin-2; Centrin2; CETN2; CETN2_HUMAN; EF hand protein 2; EF-hand protein.
Research Area	Cell biology Signal transduction Epigenetics
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse(predicted:Rat,Chicken,Pig,Cow,Rabbit)
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	20kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Centrin 2
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** Caltractin belongs to a family of calcium-binding proteins and is a structural component of the centrosome. The high level of conservation from algae to humans and its association with the centrosome suggested that caltractin plays a fundamental role in the structure and function of the microtubule-organizing

center, possibly required for the proper duplication and segregation of the centrosome. [provided by RefSeq, Jul 2008]

Function:
Plays a fundamental role in microtubule-organizing center structure and function. Required for centriole duplication and correct spindle formation. Has a role in regulating cytokinesis and genome stability via cooperation with CALM1 and CEP110.
Involved in global genome nucleotide excision repair (GG-NER) by acting as component of the XPC complex. Cooperatively with RAD23B appears to stabilize XPC. In vitro, stimulates DNA binding of the XPC:RAD23B dimer. The XPC complex is proposed to represent the first factor bound at the sites of DNA damage and together with other core recognition factors, XPA, RPA and the TFIIH complex, is part of the pre-incision (or initial recognition) complex. The XPC complex recognizes a wide spectrum of damaged DNA characterized by distortions of the DNA helix such as single-stranded loops, mismatched bubbles or single stranded overhangs. The orientation of XPC complex binding appears to be crucial for inducing a productive NER. XPC complex is proposed to recognize and to interact with unpaired bases on the undamaged DNA strand which is followed by recruitment of the TFIIH complex and subsequent scanning for lesions in the opposite strand in a 5'-to-3' direction by the NER machinery. Cyclobutane pyrimidine dimers (CPDs) which are formed upon UV-induced DNA damage esacpe detection by the XPC complex due to a low degree of structural perurbation. Instead they are detected by the UV-DDB complex which in turn recruits and cooperates with the XPC complex in the respective DNA repair.

Subcellular Location:
Cytoplasm > cytoskeleton > centrosome > centriole. Nucleus. Centrosome of S-phase, interphase and mitotic cells.

Similarity:
Belongs to the centrin family.
Contains 4 EF-hand domains.

Database links:

Entrez Gene: 1069 Human

Entrez Gene: 26370 Mouse

Entrez Gene: 84593 Rat

Omim: 300006 Human

SwissProt: P41208 Human

SwissProt: Q9R1K9 Mouse

Unigene: 82794 Human

Unigene: 24643 Mouse

Unigene: 9472 Rat

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