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

Rabbit Anti-FCP1/AF350 Conjugated antibody

SL16063R-AF350

Product Name	Anti-FCP1/AF350
Chinese Name	AF350 标记的 FCP1 蛋白抗体
Alias	CCFDN; CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) phosphatase, subunit 1; CTD of POLR2A, phosphatase of, subunit 1; CTDP1; CTDP1_HUMAN; EC 3.1.3.16; RNA polymerase II subunit A C terminal domain phosphatase; RNA polymerase II subunit A C-terminal domain phosphatase; Serine phosphatase FCP1a; TFIIF associating CTD phosphatase; TFIIF-associating CTD phosphatase 1; TFIIF-associating CTD phosphatase; Transcription factor IIF-associating CTD phosphatase 1.
Research Area	Cell biology Neurobiology Signal transduction Kinases and Phosphatases Epigenetics
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Mouse,Rat(predicted:Human,Chicken,Dog,Pig,Cow,Horse,Sheep)
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	104kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human FCP1
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:
This gene encodes a protein which interacts with the carboxy-terminus of the RAP74 subunit of transcription initiation factor TFIIF, and functions as a phosphatase that processively dephosphorylates the C-terminus of POLR2A (a subunit of RNA polymerase II), making it available for initiation of gene expression. Mutations in this gene are associated with congenital cataracts, facial dysmorphism and neuropathy syndrome (CCFDN). Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Feb 2011]

Function:
Processively dephosphorylates 'Ser-2' and 'Ser-5' of the heptad repeats YSPTSPS in the C-terminal domain of the largest RNA polymerase II subunit. This promotes the activity of RNA polymerase II.

Subcellular Location:
Nucleus.

Tissue Specificity:
Ubiquitously expressed. Isoform 3 is expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and placenta.

Post-translational modifications:
Phosphorylated. In the presence of TFIIF, the phosphorylated form has an increased CTD phosphatase activity. The phosphorylation is required for the physical interaction with GTF2F1.

DISEASE:
Defects in CTDP1 are a cause of congenital cataracts facial dysmorphism and neuropathy syndrome (CCFDN) [MIM:604168]. CCFDN is an autosomal recessive developmental disorder that occurs in an endogamous group of Vlax Roma (Gypsies). The syndrome is characterized by a complex clinical phenotype with seemingly unrelated features involving multiple organs and systems. Developmental abnormalities include congenital cataracts and microcorneae, hypomyelination of the peripheral nervous system, impaired physical growth, delayed early motor and intellectual development, facial dysmorphism and hypogonadism. Central nervous system involvement, with cerebral and spinal cord atrophy, may be the result of disrupted development with superimposed degenerative changes. Affected individuals are prone to severe rhabdomyolysis after viral infections and to serious complications related to general anesthesia (such as pulmonary edema and epileptic seizures).

Similarity:

Contains 1 BRCT domain.
Contains 1 FCP1 homology domain.

Database links:

Entrez Gene: 9150 Human

Entrez Gene: 67655 Mouse

Entrez Gene: 291414 Rat

Entrez Gene: 447713 Xenopus laevis

Entrez Gene: 442930 Zebrafish

Omim: 604927 Human

SwissProt: Q9Y5B0 Human

SwissProt: Q7TSG2 Mouse

Unigene: 465490 Human

Unigene: 312893 Mouse

Unigene: 137952 Rat

Unigene: 62700 Xenopus laevis

Unigene: 133831 Zebrafish

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