



Rabbit Anti-FCP1 antibody

SL16063R

Product Name:	FCP1
Chinese Name:	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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=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:	104kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FCP1:201-300/961
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:	PubMed
Product Detail:	This gene encodes a protein which interacts with the carboxy-terminus of the RAP74

subunit of transcription initiation factor TFIIIF, 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 TFIIIF, 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.

SWISS:

Q9Y5B0

Gene ID:

9150

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

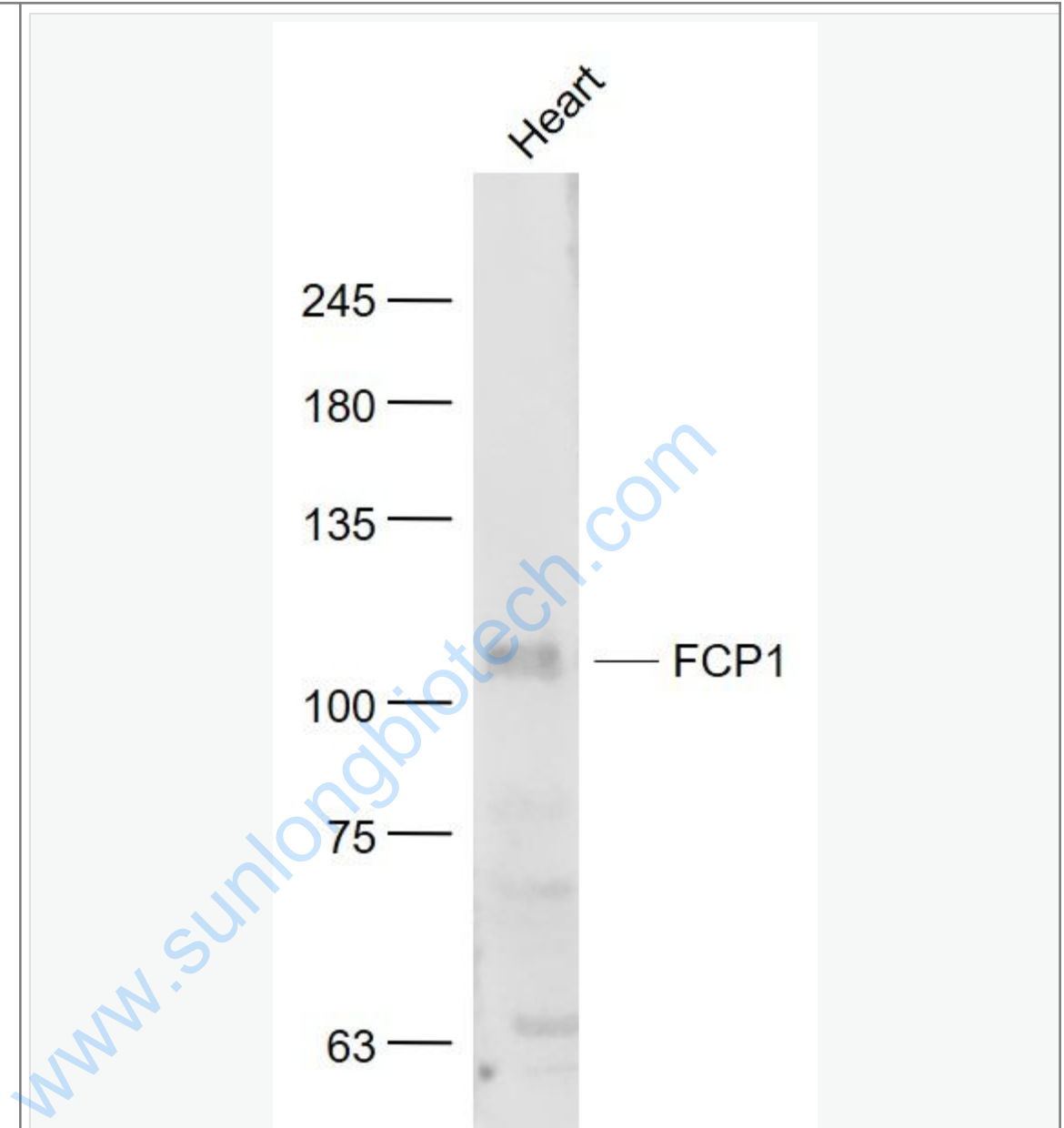
[Unigene: 62700](#) Xenopus laevis

[Unigene: 133831](#) Zebrafish

Important Note:

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

Picture:



Sample:

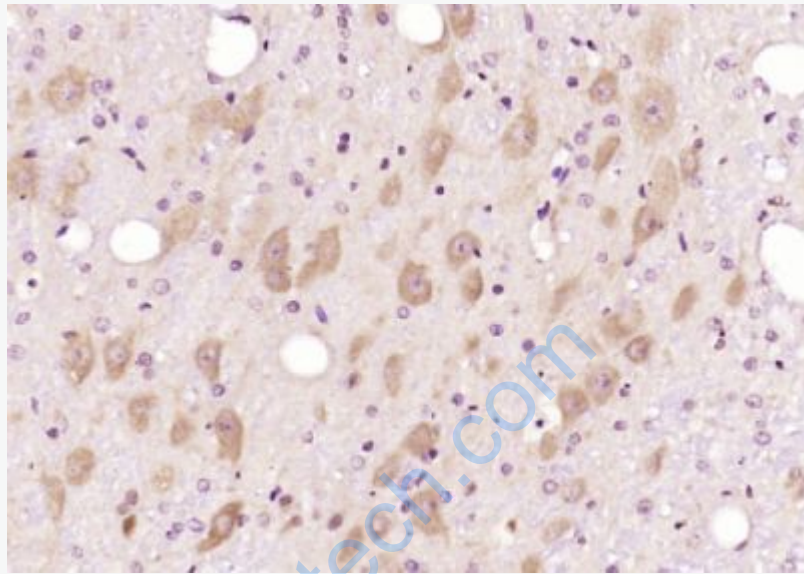
Heart(Mouse) Lysate at 40 ug

Primary: Anti- FCP1 (SL16063R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 104 kD

Observed band size: 104 kD



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 (FCP1) Polyclonal Antibody, Unconjugated (SL16063R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.