

Rabbit Anti-CDCA2 antibody

SL7786R

Product Name:	CDCA2
Chinese Name:	细胞分裂周期蛋白2抗体
Alias:	cell division cycle associated 2; Recruits PP1 onto mitotic chromatin at anaphase protein; Repo Man; Repo-Man; CDCA2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	113kDa
Cellular localization:	The nucleusThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CDCA2:361-450/1023
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:	CDCA2 is a regulator of chromosome structure during mitosis. CDCA2 forms an essential complex with protein phosphatase PP1-gamma subunit 1 (PPP1CC) and is required for the recruitment of PP1 to chromatin. Knockdown of CDCA2 by RNAi causes large-scale cell death by apoptosis, as does overexpression of a dominant-negative mutant of the protein.

Function:

Regulator of chromosome structure during mitosis required for condensin-depleted chromosomes to retain their compact architecture through anaphase. Acts by mediating the recruitment of phopsphatase PP1-gamma subunit (PPP1CC) to chromatin at anaphase and into the following interphase. At anaphase onset, its association with chromatin targets a pool of PPP1CC to dephosphorylate substrates.

Subunit:

Interacts with PPP1CC.

Subcellular Location:

Nucleus. Note=Excluded from the nucleolus. Present in nucleoplasm throughout the G1, S and G2 stages of the cell cycle. During M phase, it becomes diffuse throughout the cell as the nuclear membrane breaks down, and faintly accumulates later on metaphase chromatin. As the cell progresses to anaphase, it accumulates on chromatin. [ALTERNATIVE PRODUCTS] Event=Alternative splicing; Named isoforms=2; Name=1; IsoId=Q69YH5-1; Sequence=Displayed; Name=2; IsoId=Q69YH5-2; Sequence=VSP_025598, VSP_025599; Note=No experimental confirmation available.

Tissue Specificity:

Ubiquitously expressed.

Post-translational modifications:

Phosphorylated by CDK1. May regulate its subcellular location.

SWISS:

O69YH5

Gene ID:

157313

Database links:

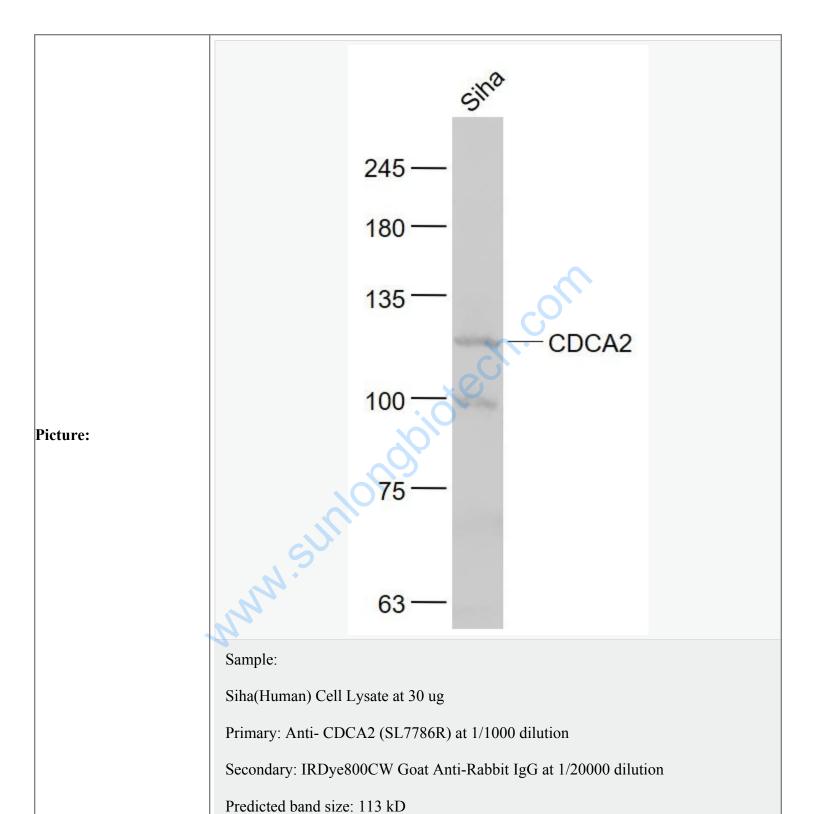
Entrez Gene: 157313Human

SwissP<u>rot: Q69YH5</u>Human

Unigene: 33366Human

Important Note:

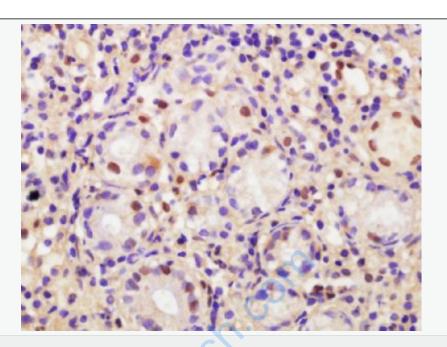
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Observed band size: 113 kD



araformaldehyde-fixed, paraffin embedded (mouse intestine); 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 (CDCA2) Polyclonal Antibody, Unconjugated (SL7786R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffinembedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-CDCA2 Polyclonal Antibody, Unconjugated(SL7786R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining