

Rabbit CDC25B Polyclonal Antibody | anti-CDC25B antibody

Anti-CDC25B Antibody Picoband

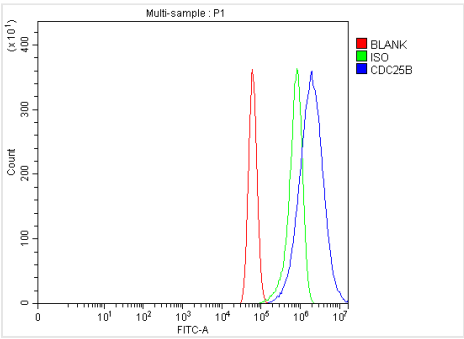
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126187	Rabbit	Human, Mouse, Rat	Western Blot, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

CDC25B; Polyclonal Antibody; Anti-CDC25B Antibody Picoband; anti-CDC25B antibody

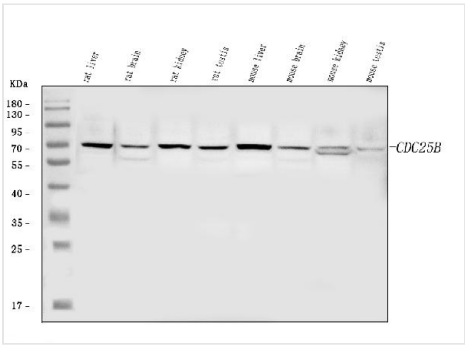
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-CDC25B antibody	WB (Western Blot), FCM/FACS (Flow Cytometry), ELISA
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human CDC25B recombinant protein (Position: M1-H486).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



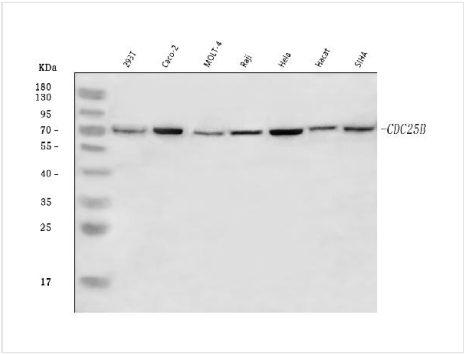
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of U87 cells using anti-CDC25B antibody (AAA126187).Overlay histogram showing U87 cells stained with AAA126187 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CDC25B Antibody (AAA126187, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 2. Western blot analysis of CDC25B using anti-CDC25B antibody (AAA126187).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: rat liver tissue lysates,Lane 2: rat brain tissue lysates,Lane 3: rat kidney tissue lysates,Lane 4: rat testis tissue lysates,Lane 5: mouse liver tissue lysates,Lane 6: mouse brain tissue lysates,Lane 7: mouse kidney tissue lysates,Lane 8: mouse testis tissue lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CDC25B antigen affinity purified polyclonal antibody (#AAA126187) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CDC25B at approximately 70 kDa. The expected band size for CDC25B is at 65 kDa.



WB (Western Blot)

Figure 1. Western blot analysis of CDC25B using anti-CDC25B antibody (AAA126187).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human 293T whole cell lysates,Lane 2: human CACO-2 whole cell lysates,Lane 3: human MOLT-4 whole cell lysates,Lane 4: human Raji whole cell lysates,Lane 5: human Hela whole cell lysates,Lane 6: human Hacat whole cell lysates.Lane 7: human SiHa whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CDC25B antigen affinity purified polyclonal antibody (#AAA126187) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CDC25B at approximately 70 kDa. The expected band size for CDC25B is at 65 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-CDC25B antibody	Central to the onset of mitosis in all eukaryotic cells is the CDC2 protein kinase, the activity of which is negatively regulated by phosphorylation and positively activated by dephosphorylation. The latter function is carried out by a specific phosphatase, CDC25. At least 3 human CDC25 genes code for the A, B, and C forms of CDC25. CDC25B is mapped to 20p13. P38 kinase has a critical role in the initiation of a G2 delay after ultraviolet radiation. Inhibition of p38 blocks the rapid initiation of this checkpoint in both human and murine cells after ultraviolet radiation. In vitro, p38 binds and phosphorylates CDC25B at serines 309 and 361, and CDC25C at serine-216; phosphorylation of these residues is required for binding to 14-3-3 proteins. In vivo, inhibition of p38 prevents both phosphorylation of CDC25B at serine-309 and 14-3-3 binding after ultraviolet radiation, and mutation of this site is sufficient to inhibit the checkpoint initiation. Regulation of CDC25B phosphorylation by p38 is a critical event for initiating the G2/M checkpoint after ultraviolet radiation.
Product Categories/Family for anti-CDC25B antibody	Primary Antibodies, Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	4757950
NCBI GeneID	994
NCBI Accession #	NP_004349.1
NCBI GenBank Nucleotide #	NM_004358.3
UniProt Accession #	P30305; O43551; Q13971; Q5JX77; Q6RSS1; Q9BRA6; D3DVY1; D3DVY2; D3DVY3; D3DVY4
Molecular Weight	64,987 Da
NCBI Official Full Name	M-phase inducer phosphatase 2 isoform 2
NCBI Official Synonym Full Names	cell division cycle 25B
NCBI Official Symbol	CDC25B
NCBI Protein Information	M-phase inducer phosphatase 2; dual specificity phosphatase Cdc25B
UniProt Protein Name	M-phase inducer phosphatase 2
UniProt Gene Name	CDC25B
UniProt Synonym Gene Names	CDC25HU2
UniProt Entry Name	MPIP2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://www.aaabiotech.com/polyclonal/cdc25b-antibody-western-blot-flow-cytometry-elisa/126187>