Data Sheet (Cat.No.TMAC-00772)

Anti-CDC45 Antibody (6Q41)

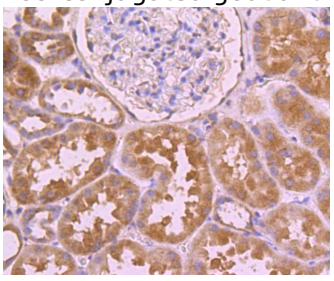
Product Details

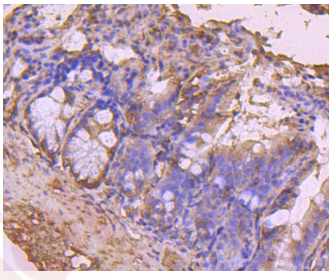
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 66 kDa.
Clone:	6Q41
Purification:	ProA affinity purified

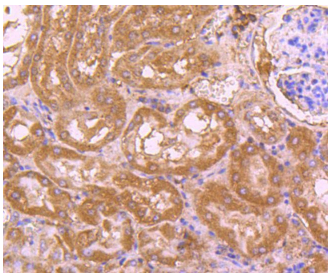
Applications

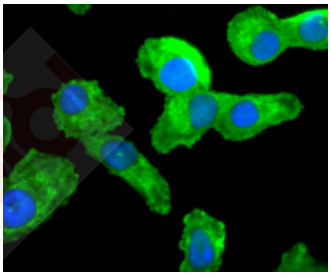
Verified Activity:

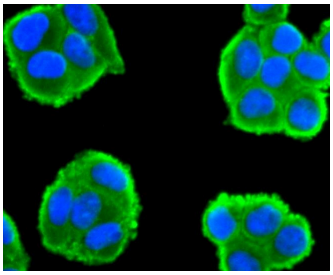
1. Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-CDC45 antibody. Counter stained with hematoxylin.
2. Immunohistochemical analysis of paraffin-embedded mouse colon tissue using anti-CDC45 antibody. Counter stained with hematoxylin.
3. Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-CDC45 antibody. Counter stained with hematoxylin.
4. ICC staining CDC45 in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
5. ICC staining CDC45 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
6. ICC staining CDC45 in 293T cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
7. Flow cytometric analysis of 293 cells with CDC45 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

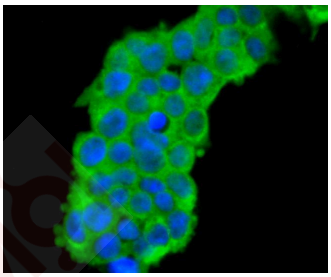


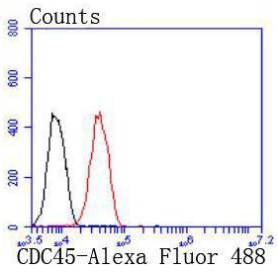












Application: FCM,ICC/IF,IHC,WB

Recommended: WB: 1:1000; IHC: 1:50-200; ICC/IF: 1:100-500; FCM: 1:50-100

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein
Uniprot ID:	O75419
Synonyms:	Cell division control protein 45 homolog;CDC45;CDC45 like;CDC 45L;cell division cycle 45 (S. cerevisiae homolog) like;CDC45L2;CDC45 cell division cycle 45 like;Cell division cycle 45 like; CDC45 related protein;PORC PI 1;PORC-PI-1;CDC 45;Cell division cycle 45 like 2

Research Background

Cell cycle events are regulated by the sequential activation and deactivation of cyclin dependent kinases (Cdks) and by the proteolysis of cyclins. The cell division cycle (Cdc) genes are required at various points in the cell cycle. Cdc25A, Cdc25B and Cdc25C protein tyrosine phosphatases function as mitotic activators by dephosphorylating Cdc2 p34 on regulatory tyrosine residues. Cdc6 and Cdc45 are the mammalian homologs of S. cerevisiae Cdc6 and Cdc45, which are involved in the initiation of DNA replication. Cdc37 appears to facilitate Cdk4/cyclin D1 complex formation and has been shown to form a stable complex with HSP 90. Cdc34, Cdc27 and Cdc16 function as ubiquitin-conjugating enzymes. Cdc34 is thought to be the structural and functional homolog of S. cerevisiae Cdc34, which is essential for the G1 to S phase transition. Cdc16 and Cdc27 are components of the APC (anaphase-promoting complex) which ubiquitinates cyclin B, resulting in cyclin B/Cdk complex degradation.