
CDT2 Rabbit pAb

Catalog Number: bs-7935R

Target Protein: CDT2

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), ELISA (1:5000-10000)

Reactivity: (predicted:Human, Mouse, Rat, Pig, Sheep, Dog, Horse)

Predicted MW: 80 kDa

Subcellular: Cell membrane ,Cytoplasm ,Nucleus

Locations:

Entrez Gene: 51514

Swiss Prot: Q9NZJ0

Source: KLH conjugated synthetic peptide derived from human RAMP/CDT2: 181-280/730.

Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Substrate-specific adapter of a DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complex required for cell cycle control, DNA damage response and translesion DNA synthesis. The DCX(DTL) complex, also named CRL4(CDT2) complex, mediates the polyubiquitination and subsequent degradation of CDT1 and CDKN1A/p21(CIP1). CDT1 degradation in response to DNA damage is necessary to ensure proper cell cycle regulation of DNA replication. CDKN1A/p21(CIP1) degradation during S phase or following UV irradiation is essential to control replication licensing. Most substrates require their interaction with PCNA for their polyubiquitination: substrates interact with PCNA via their PIP-box, and those containing the 'K+4' motif in the PIP box, recruit the DCX(DTL) complex, leading to their degradation. In undamaged proliferating cells, the DCX(DTL) complex also promotes the 'Lys-164' monoubiquitination of PCNA, thereby being involved in PCNA-dependent translesion DNA synthesis.

Tissue specificity: Expressed in placenta and testis, very low expression seen in skeletal muscle. Detected in all hematopoietic tissues examined, with highest expression in thymus and bone marrow. A low level detected in the spleen and lymph node, and barely detectable

level in the peripheral leukocytes. RA treatment down-regulated the expression in NT2 cell.

PRODUCT SPECIFIC PUBLICATIONS

[IF=3.989] Weixuan Wang. et al. Overexpression of 15-Hydroxyprostaglandin Dehydrogenase Inhibits A549 Lung Adenocarcinoma Cell Growth via Inducing Cell Cycle Arrest and Inhibiting Epithelial-Mesenchymal Transition. Cancer Manag Res. 2021 Nov;13:8887-8900 WB ; Human . 34876851

[IF=3.8] Xuan Xiuyun. et al. DTL promotes the growth and migration of melanoma cells through the ERK/E2F1/BUB1 axis. SCI REP-UK. 2024 Nov;14(1):1-17 IHC,WB ; Mouse,Human . 39487277