### bs-7935R

## [ Primary Antibody ]

# www.bioss.com.cn

# CDT2 Rabbit pAb

sales@bioss.com.cn techsupport@bioss.com.cn 400-901-9800

DATASHEET -

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

GeneID: 51514 SWISS: Q9NZJ0

Target: CDT2

**Immunogen:** KLH conjugated synthetic peptide derived from human

RAMP/CDT2: 181-280/730.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

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.

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 80 kDa

Subcellular Cell membrane, Cytoplasm

Location: , Nucleus

#### - SELECTED CITATIONS -

- [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