

Anti-human DDR1 Antibody mIgG2b

Catalog Number: A1030

SPECIFICATIONS

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Product Name Anti-human DDR1 antibody, mIgG2b

Source Derive from mouse hybridoma, mouse immunized with human DDR1 extra-cellular domain

Clone Z13BS9
Species Reactivity Human
Isotype Mouse IgG2a

Formulation 1x PBS, pH6.8. Sterile

Stability & Storage 1 month at 4°C; 12 months at <-20°C; Avoid repeated freeze-thaw

Purity >95%

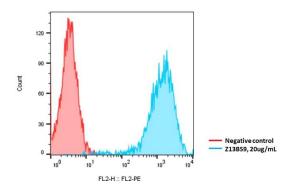
Protein Aggregation Not obvious on SDS-PAGE

Application Flow cytometry, ELISA, cell-based assay

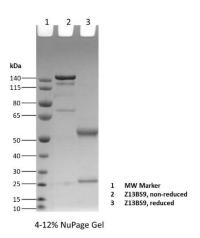
DATA

A. Flow cytometry

Detection of human DDR1 on Human DDR1-CHO-K1 cells (Cat. #C3030) by flow cytometry. Anti-human DDR1 antibody Z13BS9 (Cat. #A1030) was incubated with human DDR1-CHO-K1 cells (Cat. #C3030), followed by staining with PE-anti-mouse IgG.



B. SDS-PAGE analysis of anti-human DDR1 antibody Z13BS9 (Cat. # A1030)



BACKGROUND

DDR1 (discoidin domain receptor tyrosine kinase 1), also known as CD167, CAK, DDR, NEP, HGK2, PTK3, RTK6, TRKE, EDDR1, MCK10, NTRK4, and PTK3A, is a receptor tyrosine kinase (RTK) and belongs to a subfamily of tyrosine kinase receptors with a homology region to the Dictyosteliumdiscoideum protein discoidin I in its extracellular domain. DDR1 consists of three regions (an extracellular ligand binding domain, a transmembrane domain, and an intracellular region containing a kinase domain), with its kinase activity induced by receptor-specific ligand binding. Collagen binding to DDR1 stimulates its autophosphorylation, activating kinase activity and signaling to downstream signaling pathways. DDR1 expression is restricted to epithelial cells, particularly in the kidney, lung, gastrointestinal tract, and brain and is significantly over-expressed in several human tumors from breast, ovarian, esophageal, and brain. DDR1 plays a key role in the development and progression of breast and ovarian cancer and is a promising therapeutic target.

References

Johnson, J. D., Edman, J. C., Rutter, W. J., *Proc. Nat. Acad. Sci.* 90: 5677-5681, 1993. Chen, L., et al, *Frontiers in Cell and Dev. Bio*.747314, 2021 Letinger, B., *Int Rev Cell Mol Biol.*, 310: 39-87, 2014 Vogel, W., et al., *Mol. Cell*, 1: 13–23, 1997