

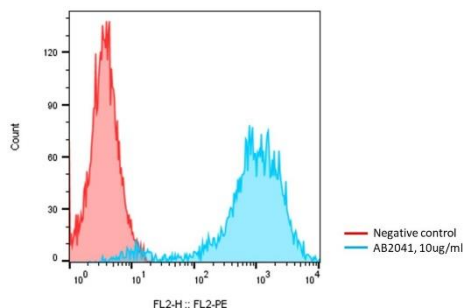
SPECIFICATIONS

Catalog Number	A1016
Product Name	Anti-human DDR1 antibody AB2041
Source	Recombinant anti-human DDR1 mAb produced from HEK293 cells
Clone	AB2041 (VH and VL sequences are derived from PCT publication, WO2014047624A1)
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

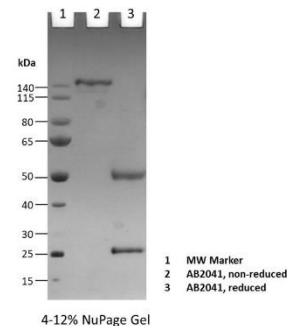
DATA

A. Flow cytometry

Detection of human DDR1 on Human DDR1-CHO-K1 cells (Cat. # C3030) by flow cytometry. Anti-human DDR1 antibody AB2041 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 AB2041 (Cat. # A1016)



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 *Dictyostelium discoideum* 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

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