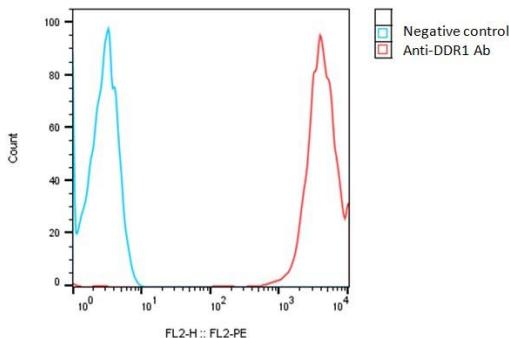


SPECIFICATIONS

Catalog Number	C3081
Cell Line Name	Human DDR1-CHO-K1 stable cell line
Accession Number	Full-length human DDR1 (NM_001954.5)
Host Cell	Adherent CHO-K1
Quantity	Two vials of frozen cells (2x10 ⁶ per vial)
Culture Medium	DMEM with 10% FBS, 4µg/ml puromycin
Freezing Medium	90% FBS and 10% DMSO
Storage	Liquid nitrogen

DATA

Detection of human DDR1 expression on CHO-K1 cells using a mouse anti-human anti-DDR1 monoclonal antibody, followed by staining with a PE-anti-mouse IgG antibody. The cells that are stained only with PE-anti-mouse IgG antibody are used as a negative control.


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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