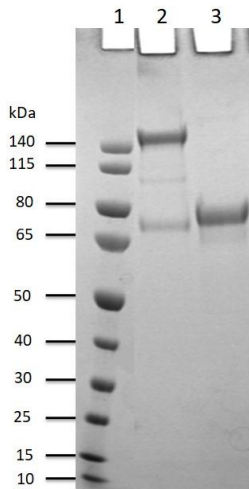


DESCRIPTION

Catalog Number/Size	P1024-100: 100 µg P1024-200: 200 µg P1024-500: 500 µg						
Source	Human DDR1 (Accession#AQY76781) extracellular domain (Asp21-Ile418) fused with the Fc portion of human IgG1, produced from HEK293 cells.						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Human DDR1 (Asp21-Ile418) Accession#AQY76781</td> <td style="text-align: center;">GSGGGG</td> <td style="text-align: center;">Human IgG1 (Asp104-Lys330)</td> </tr> <tr> <td style="text-align: center;">N-terminal</td> <td></td> <td style="text-align: center;">C-terminal</td> </tr> </table>	Human DDR1 (Asp21-Ile418) Accession#AQY76781	GSGGGG	Human IgG1 (Asp104-Lys330)	N-terminal		C-terminal
Human DDR1 (Asp21-Ile418) Accession#AQY76781	GSGGGG	Human IgG1 (Asp104-Lys330)					
N-terminal		C-terminal					
Structure	Disulfide-linked homodimer						
Predicted Molecular Weight	70 kDa, at reducing conditions						
Concentration	1 mg/mL in sterile 1xPBS, pH 6.8						
Storage	-20°C or below						
Estimated Purity	>95% as determined by SDS-PAGE						
Protein Aggregation	<5% as determined by SDS-PAGE						

DATA

SDS-PAGE Analysis



4-12% NuPage Gel.

20 µg/lane of human DDR1Fc Chimera was resolved on SDS-PAGE gel in non-reducing (lane 2) and reducing (lane 3) conditions and visualized by CoomassieBlue staining.

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Application Biochemical analysis

Product Description 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 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.* volume 9, article #747314, 2021
Letinger, B., *Int Rev Cell Mol Biol.*, 310: 39-87, 2014
Vogel, W., et al., *Mol. Cell*, 1: 13-23, 1997

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