Data Sheet (Cat.No.TMPY-01728)

TargetMol

DDR2 Protein, Mouse, Recombinant (His)

General Information

Synonyms: AW495251;discoidin domain receptor tyrosine kinase 2;tyro10;Ntrkr3

Protein Construction: Lys22-Arg399

Species: Mouse

Expression Host: HEK293 Cells

Accession: Q62371

Molecular Weight: 43.72 kDa (Predicted); 55-65 kDa (Due to glycosylation)

QC Testing

Biological Activity: Activity testing is not tested. It is theoretically active, but we cannot guarantee it.

Purity: > 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC

Endotoxin: < 1.0 EU/μg of the protein as determined by the LAL method.

Formulation: Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Discoidin domain receptor (DDR) 2 is a collagen receptor that is implicated in several cancer types including breast and prostate cancers. DDR2 might be closely associated with ovarian cancer progression and metastasis. Its high expression may serve as a potential prognostic biomarker in human ovarian cancer.

Reference

Olaso E, et al. (2001) DDR2 receptor promotes MMP-2-mediated proliferation and invasion by hepatic stellate cells. J Clin Invest. 108(9): 1369-78.

Zhang W, et al. (2006) Expression of discoidin domain receptor 2 (DDR2) extracellular domain in pichia pastoris and functional analysis in synovial fibroblasts and NIT3T3 cells. Mol Cell Biochem. 290(1-2): 43-53.

Leitinger B, et al. (2006) The discoidin domain receptor DDR2 is a receptor for type X collagen. Matrix Biol. 25(6): 355-64.

Leitinger B, et al. (2004) The D2 period of collagen II contains a specific binding site for the human discoidin domain receptor, DDR2. J Mol Biol. 344(4): 993-1003.