

Recombinant Human PRDM2/RIZ1 Protein

Catalog Number: PKSH031203

Note: Centrifuge before opening to ensure complete recovery of vial contents.

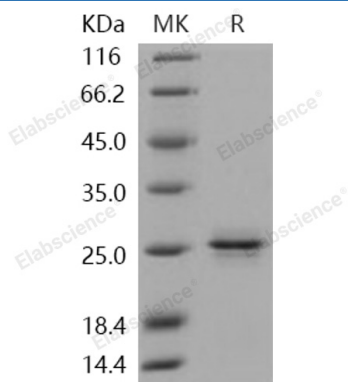
Description

Species	Human
Source	E.coli-derived Human PRDM2/RIZ1 protein Met 1-Ala 200
Calculated MW	23 kDa
Observed MW	26 kDa
Accession	NP_036363.2
Bio-activity	Not validated for activity

Properties

Purity	> 96 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 150mM NaCl, 0.5mM DTT, 0.5mM GSH, pH 8.0 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

Data



> 96 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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PR domain containing 2; with ZNF domain (PRDM2); also known as zinc finger protein RIZ; is a member of histone methyltransferase (HMT) class enzymes that methylate lysine residues of histones or proteins. HMTs contain a conserved catalytic core termed the SET domain; which shares sequence homology with an independently described sequence motif, the PR domain. PRDM2 contains 8 C2H2-type zinc fingers and a distinct SET domain; and is highly expressed in retinoblastoma cell lines and in brain tumors; as well as in a number of other cell lines and in brain; heart; skeletal muscle; liver and spleen. PRDM2 is a S-adenosyl-L-methionine-dependent histone methyltransferase that specifically methylates 'Lys-9' of histone H3; and is identified as a tumor suppressor. It is reported that intact PR(SET) sequence is required for tumor suppression functions; mutations in the PR domain caused activity reduction in human cancers. Also; S-adenosylhomocysteine or methyl donor deficiency inhibits RIZ1 and other H3 lysine 9 methylation activities. PRDM2 may also function as a DNA-binding transcription factor. It binds to the macrophage-specific TPA-responsive element (MTE) of the HMOX1 (heme oxygenase 1) gene and act as a transcriptional activator. In addition; PRDM2 (RIZ) is able to binds to the retinoblastoma protein (RB) and also interacts with GATA3.