



Recombinant Protein Technical Manual

Recombinant Human PRDM2/RIZ1 Protein (GST Tag)

RPES1719

Product Data:

Product SKU: RPES1719

Size: 50µg

Species: Human

Expression host: E. coli

Uniprot: NP_036363.2

Protein Information:

Molecular Mass: 49.6 kDa

AP Molecular Mass: 49.6 kDa

Tag: N-GST

Bio-activity:

Purity: > 86 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: 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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: HUMHOXY1;KMT8;MTB-ZF;RIZ;RIZ1;RIZ2

Immunogen Information:

Sequence: Met 1-Ala 200

Background:

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.