

**Recombinant Human PRDM2 / RIZ1 Protein****Cat.NO.: TP06683**

3th Edition

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

**Description:**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.

**Form:**PBS**Molecular Weight:**23 kDa**Sequences:**Met 1-Ala 200**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.