
Recombinant Human DUSP3 / VHR Protein**Cat.NO.: TP07569**

3th Edition

Synonyms:VHR

Description:Vaccinia H1-related phosphatase (VHR) is classified as a dual-specificity phosphatase (DUSP), and the other name is dual-specificity phosphatase 3 (DUSP3). DUSPs are a heterogeneous group of protein phosphatases that can dephosphorylate both phosphotyrosine and phosphoserine/phosphothreonine residues within the one substrate. Unlike typical DUSPs, VHR lacks mitogen-activated protein kinase (MAPK)-binding domain, and shows poor activity against MAPKs. VHR often act on bisphosphorylated protein substrates, it displays a strong preference for dephosphorylating phosphotyrosine residues over phosphothreonine residues. VHR has been identified as a novel regulator of extracellular regulated kinases (ERKs). VHR is responsible for the rapid inactivation of ERK following stimulation and for its repression in quiescent cells. VHR is a negative regulator of the Erk and Jnk pathways in T cells and, therefore, may play a role in aspects of T lymphocyte physiology that depend on these kinases.

Form:PBS**Molecular Weight:**20.6 kDa**Sequences:**Met 1-Pro 185**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.