

Recombinant Protein Technical Manual Recombinant Human DUSP3/VHR Protein (His Tag) RPES3811

Product Data:

Product SKU: RPES3811	Size: 10µg
Species: Human	Expression host: E. coli

**Uniprot:** P51452

## **Protein Information:**

Molecular Mass:	22.6 kDa
AP Molecular Mass:	20 kDa
Tag:	N-His
Bio-activity:	
Purity:	> 95% as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 $\mu$ m filtered solution of PBS, pH7.4.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Dual specificity protein phosphatase 3;DUSP3;Dual specificity protein phosphatase VHR;Vaccinia H1-related phosphatase;VHR

## Sequence: Ser2-Pro185

## Background:

Human DUSP3 belongs to the dual specificity protein phosphatase subfamily. DUSPs are a heterogeneous of protein phosphatases that can dephosphorylate both phosphotyrosine and group phosphoserine/phosphothreonine residues within the one substrate. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. DUSPs are major modulators of critical signalling pathways that are dysregulated in various diseases. They negatively regulate members of the mitogen-activated protein kinase superfamily, which are associated with cellular proliferation and differentiation. DUSP3 is expressed in human tissues including breast and ovarian. DUSP3 shows activity both for tyrosine-protein phosphate and serine-protein phosphate, but displays a strong preference toward phosphotyrosines. Human DUSP3 specifically dephosphorylates and inactivates ERK1 and ERK2.