

## Recombinant Human EIF2AK3 (N-GST tag)

Cat No:HR2R1344

For research use only

### Overview

|                    |  |
|--------------------|--|
| Quantity           | 10 ?g  |
| Gene Symbol        | EIF2AK3  |
| Gene ID            | N/A  |
| Accession          | NM_004836  |
| Alternative Name   | PERK, PEK, WRS, HRI, DKFZp781H1925   |
| Species            | Human  |
| Source             | Insect cells   |
| Description        | EIF2AK3 phosphorylates the alpha subunit of eukaryotic translation-initiation factor 2 (EIF2) leading to its inactivation and a rapid reduction of translational initiation and repression of global protein synthesis. EIF2AK3 is a type I membrane protein located in the endoplasmic reticulum (ER), where it is induced by ER stress caused by malformed proteins . EIF2AK3 plays a major role in the ability of cells to adapt to ER stress and is also involved in an integrated adaptive response to hypoxic stress in HeLa cells . EIF2AK3 functions in iron homeostasis and may play a role in hemolytic and inflammatory anemia. |
| Functions          | The specific activity of EIF2K3 was determined to be 18 nmol /min/mg as per activity assay protocol.   |
| Formulation        | 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.   |
| Solubility         | N/A  |
| Appearance         | Liquid   |
| Molecular Weight   | 115  |
| Purity             | 70% - 90%  |
| Concentration      |  |
| Shipping Condition | Dry Ice  |
| Storage Condition  | Store product at ?70?C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.  |