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## **phospho-EIF2S1 (Ser49) Antibody Blocking Peptide**

Catalog Number: bs-14541P

Activity: Not tested

Purification: HPLC

Storage: Shipped at 4°C. Stored at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** eIF2 alpha is a 36 kDa protein which is ubiquitously expressed in many cell types. The eIF2 protein, which is composed of three subunits (alpha, beta and gamma), is one of the key molecules in the initiation of translation. In mammalian cells, eIF2 alpha is phosphorylated at serine 51 (human EIF2 alpha, the equivalent residue in mouse is serine 52) by at least two kinases: the haem-controlled repressor (HCR) and the interferon inducible double stranded RNA-dependent protein kinase (PKR). Phosphorylation of eIF2 alpha blocks the GDP-GTP exchange activity of eIF2 beta, resulting in the suppression of protein synthesis. The phosphorylation of eIF2 alpha is an important regulatory process in protein synthesis.