3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

UHMK1 (KIS), GST-tagged, human recombinant, expressed in *Sf*9 cells

Catalog Number **SRP5368**
Storage Temperature –70 °C

Synonyms: UHMK1, KIS, KIST

Product Description

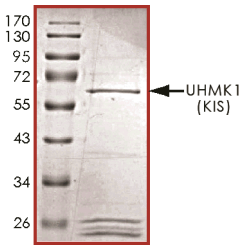
UHMK1(KIS) or U2AF homology motif (UHM) kinase 1 is a serine/threonine protein kinase that promotes cell cycle progression through G_1 phase. UHMK1 phosphorylates the cyclin-dependent kinase inhibitor 1B (p27Kip1) and this results in its export to the nucleus where it undergoes degradation. UHMK1 is a growth factor-dependent nuclear kinase which can regulate cell cycle progression.[1] Elevated levels of UHMK1 protein in leukemia cells has been shown to promote cell cycle progression. UHMK1 has also been shown to function in the adult nervous system where it is highly expressed and the gene has been associated with schizophrenia.[2]

Recombinant full-length human UHMK1 (KIS) was expressed by baculovirus in *Sf*9 insect cells using an N-terminal GST-tag. The gene accession number is NM_144624. It is supplied in 50 mM Tris-HCl, pH 7.5, 50 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~65 kDa

The enzymatic activity of this product has not been determined.

Figure 1.
SDS-PAGE Gel of Typical Lot:
≥70% (SDS-PAGE, densitometry)



Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

References

1. Boehm. et al., A growth factor-dependent nuclear kinase phosphorylates p27(Kip1) and regulates cell cycle progression. EMBO J., **21**, 3390-3401 (2002).
2. Bieche. et al., Quantitative RT-PCR reveals a ubiquitous but preferentially neural expression of the KIS gene in rat and human. Molec. Brain Res., **114**, 55-64 (2003).

RC,MAM 10/12-1