

Product datasheet for TP508599

OriGene Technologies, Inc.

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Kpna1 (NM_008465) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse karyopherin (importin) alpha 1 (Kpna1), with C-

terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone >MR208599 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MSTPGKENFRLKSYKNKSLNPDEMRRRREEEGLQLRKQKREEQLFKRRNVATAEEETEEEVMSDGGFHEA QINNMEMAPGGVITSDMTDMIFSNSPEQQLSATQKFRKLLSKEPNPPIDEVINTPGVVARFVEFLKRKEN CTLQFESAWVLTNIASGNSLQTRNVIQAGAVPIFIELLSSEFEDVQEQAVWALGNIAGDSTMCRDYVLNC NILPPLLQLFSKQNRLTMTRNAVWALSNLCRGKSPPPEFAKVSPCLNVLSWLLFVSDTDVLADACWALSY LSDGPNDKIQAVIDAGVCRRLVELLMHNDYKVVSPALRAVGNIVTGDDIQTQVILNCSALQSLLHLLSSP KESIKKEACWTISNITAGNRAQIQTVIDANMFPALISILQTAEFRTRKEAAWAITNATSGGSAEQIKYLV ELGCIKPLCDLLTVMDAKIVQVALNGLENILRLGEQEAKRNGSGINPYCALIEEAYGLDKIEFLQSHENQ

EIYQKAFDLIEHYFGTEDEDSSIAPQVDLSQQQYIFQQCEAPMEGFQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK
Predicted MW: 60.2 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 032491





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Locus ID: 16646

UniProt ID:Q60960RefSeq Size:4022Cytogenetics:16 B3RefSeq ORF:1617

Synonyms: AW494490; IPOA5; mSRP1; NPI1; Rch2

Summary: Functions in nuclear protein import as an adapter protein for nuclear receptor KPNB1. Binds

specifically and directly to substrates containing either a simple or bipartite NLS motif.

Docking of the importin/substrate complex to the nuclear pore complex (NPC) is mediated by KPNB1 through binding to nucleoporin FxFG repeats and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to importin-beta and the three components separate and importin-alpha and -beta are re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran from importin. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of

Ran between the cytoplasm and nucleus.[UniProtKB/Swiss-Prot Function]