

## Product datasheet for TP527506

### Dab2ip (NM\_001114124) Mouse Recombinant Protein

#### Product data:

|                                       |  |
|---------------------------------------|--|
| Product Type:                         | Recombinant Proteins   |
| Description:                          | Purified recombinant protein of Mouse disabled 2 interacting protein (Dab2ip), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug |
| Species:                              | Mouse  |
| Expression Host:                      | HEK293T  |
| Expression cDNA Clone or AA Sequence: | >MR227506 representing NM_001114124<br>Red=Cloning site Green=Tags(s)  |

MSAGGNARKSTGRPSYYYRLLRRPRLQQRSRSRSTRPARESPQERPGSRRSLPGSMSEKNPSMEPSAS  
TPFRVTGFLSRRLKGSIKRTKSQPKLDRNHFSRHILPGFRSAAAAAADNERSHLMPLRKESRSHELLSP  
SSAVEALDLSMEEVVIKPVHSSILGQDYCFEVTSSGSKCFSCRSAAERDKWMENLRRAVHPNKDNSRR  
VEHILKLWVIEAKDLPKAKKYLCELCLDDVLYARTTSKLTNDNVFWGEHFEFHNLPLRTVTVHLYRETD  
KKKKKERNNSYLGLVSLPAASVAGRQFVEKWYPVTPNPKGGKGPMPIRIKARYQTVSILPMEMYKEFAE  
HITNHYLGLCAALEPILSAKTKEEMASALVHILQSTGKVKDFLTDLMMSEVDRCDNEHLIFRENTLTK  
AIEEYLKLVGQKYLQDALGEFIKALYESDENCEVDPSKCSSADLPEHQGNLKMCCELAFCKIINSYCVFP  
RELKEVFASWRQECSSRGRPDISERLISASLFLRFLCPAIMSPSLFNLLQEYPPDDRTARTLTIAKVTQN  
LANFAKFGSKEEYMSFMNQFLEHEWTNMQRFLLEISNPETLSNTAGFEGYIDLGRESSLHLLWEAVSQ  
LDQSVVSKLGPLRILRDVHTALSTPGSGQLPGTNDLASTPGSGSSVSAGLQKMMVIENDLSGLIDFTRL  
PSPTPENKDLFFVTRSSGVQPSPARSSSYSEANEPDLQMANGSKLSMVDLQDARTLDGEAGSPVGPDAL  
PADGQVPATQLLAGWPARAAPVSLAGLATVRRVPTPTPTPGTSEGAPGRPQLLAPLSFQNPVYQMAAGLP  
LSPRGLGDSGSEGHSSLSHSNSEELAAAAKLSFSTAAEELARRPGELARRQMSLTKGGQPVTVPQRNS  
AGPQRRIDQPPPPPPPPPPAPRGRTPPTLLSTLQYPRPSSGTLASAPDWAGPGTRLRQSSSSKGDSP  
LKPRAMHKQGPPVSPNALDRTAAWLLTMNAQLLEDEGLGPDPPHRDRLRSKEELSQAEDLAVLQDKLR  
ISTKKLEEYETLFKCEETTQKLVLEYQARLEEGEERLRQQEDKDIQMKGIISRLMSVEEELKKDHAEM  
QAAVDSKQKIIDAQEKRIASLDAANARLMSALTQLKERYSMQARNGVSPTNPTKLQITENGEFRNSSNC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

|                |   |
|----------------|---|
| Tag:           | C-MYC/DDK   |
| Predicted MW:  | 131.7 kDa   |
| Concentration: | >0.05 µg/µL as determined by microplate BCA method          |
| Purity:        | > 80% as determined by SDS-PAGE and Coomassie blue staining |



[View online »](#)

|                      |  |
|----------------------|--|
| <b>Buffer:</b>       | 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol   |
| <b>Note:</b>         | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process. |
| <b>Storage:</b>      | Store at -80°C after receiving vials.  |
| <b>Stability:</b>    | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.        |
| <b>RefSeq:</b>       | <a href="#">NP_001107596</a>   |
| <b>Locus ID:</b>     | 69601  |
| <b>UniProt ID:</b>   | <a href="#">Q3UHC7</a> , <a href="#">Q52KF5</a>  |
| <b>RefSeq Size:</b>  | 6540   |
| <b>Cytogenetics:</b> | 2 B  |
| <b>RefSeq ORF:</b>   | 3567   |
| <b>Synonyms:</b>     | 2310011D08Rik; AI480459; Aip1; mKIAA1743   |

**Summary:**

Functions as a scaffold protein implicated in the regulation of a large spectrum of both general and specialized signaling pathways. Involved in several processes such as innate immune response, inflammation and cell growth inhibition, apoptosis, cell survival, angiogenesis, cell migration and maturation. Plays also a role in cell cycle checkpoint control; reduces G1 phase cyclin levels resulting in G0/G1 cell cycle arrest. Mediates signal transduction by receptor-mediated inflammatory signals, such as the tumor necrosis factor (TNF), interferon (IFN) or lipopolysaccharide (LPS). Modulates the balance between phosphatidylinositol 3-kinase (PI3K)-AKT-mediated cell survival and apoptosis stimulated kinase (MAP3K5)-JNK signaling pathways; sequesters both AKT1 and MAP3K5 and counterbalances the activity of each kinase by modulating their phosphorylation status in response to proinflammatory stimuli. Acts as a regulator of the endoplasmic reticulum (ER) unfolded protein response (UPR) pathway; specifically involved in transduction of the ER stress-response to the JNK cascade through ERN1. Mediates TNF-alpha-induced apoptosis activation by facilitating dissociation of inhibitor 14-3-3 from MAP3K5; recruits the PP2A phosphatase complex which dephosphorylates MAP3K5 on 'Ser-966', leading to the dissociation of 14-3-3 proteins and activation of the MAP3K5-JNK signaling pathway in endothelial cells. Mediates also TNF/TRAF2-induced MAP3K5-JNK activation, while it inhibits CHUK-NF-kappa-B signaling. Acts a negative regulator in the IFN-gamma-mediated JAK-STAT signaling cascade by inhibiting smooth muscle cell (VSMCs) proliferation and intimal expansion, and thus, prevents graft arteriosclerosis (GA). Acts as a GTPase-activating protein (GAP) for the ADP ribosylation factor 6 (ARF6) and Ras. Promotes hydrolysis of the ARF6-bound GTP and thus, negatively regulates phosphatidylinositol 4,5-bisphosphate (PIP2)-dependent TLR4-TIRAP-MyD88 and NF-kappa-B signaling pathways in endothelial cells in response to lipopolysaccharides (LPS). Binds specifically to phosphatidylinositol 4-phosphate (PtdIns4P) and phosphatidylinositol 3-phosphate (PtdIns3P). In response to vascular endothelial growth factor (VEGFA), acts as a negative regulator of the VEGFR2-PI3K-mediated angiogenic signaling pathway by inhibiting endothelial cell migration and tube formation. In the developing brain, promotes both the transition from the multipolar to the bipolar stage and the radial migration of cortical neurons from the ventricular zone toward the superficial layer of the neocortex in a glial-dependent locomotion process. Probable downstream effector of the Reelin signaling pathway; promotes Purkinje cell (PC) dendrites development and formation of cerebellar synapses. Functions also as a tumor suppressor protein in prostate cancer progression; prevents cell proliferation and epithelial-to-mesenchymal transition (EMT) through activation of the glycogen synthase kinase-3 beta (GSK3B)-induced beta-catenin and inhibition of PI3K-AKT and Ras-MAPK survival downstream signaling cascades, respectively.[UniProtKB/Swiss-Prot Function]