

Recombinant Mouse BIR1E Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51969

Size: 10ug, 100ug

Protein Name: Baculoviral IAP repeat-containing protein 1e (Neuronal apoptosis inhibitory protein 5)

Synonym: Naip5, Birc1e, Naip-rs3

UniProt ID: Q9R016

UniProt Link: www.uniprot.org/uniprotkb/Q9R016/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1403 AA

Molecular Weight: 160 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAEHGESSEDRISEIDYEFPELSALLGVDAFQVAKSQEEEEHKERMKMKKGFNSQMRSEAKRLKT
FETYDTRFSWTPQEMAAAGFYHTGVRLGVQCFCSSLILFGNSLRKLPRIERHKKLRPECEFLQGKDVG
NIGKYDIRVKRPEKMLRGKARYHEEEARLESFEDWPFYAHGTSPRVLSAAGFVFTGKRDTVQCFS
CGGSLGNWEEGDDPWKEHAKWFPKCEFLQSKKSSEEIAQYIQSYEGFVHVTGEHFVKSWVRREL
MVSAYCNDVSFANEELRMDMFKDWPQESPVGVEALVRAGFFYTGKKDIVRCFSCGGCLEKWAEG
DDPMEDHIKFFPECVFLQTLKSSAEVIPTLQSQYALPEATETTRESNHGDAAAVHSTVVDLGRSE
WFQEARSLSEQLRDNYTKATFRHMNLPEVCSSLGTDHLLSCDVSIIKSHISQPVQEALTIPEVFSN
SVMCVEGETGSGKTTFLKRIAFWASGCCPLLYRFQLVFYLSLSSITPDQGLANIICAQLLGAGGCISE
VCLSSSIQQLQHQLVFLDDYSGLASLPQALHTLITKNYLSRTCLLIHVHTNRVRDIRLYLGTSLEIQEF
PFYNTVSVLRKFFSHDIICVEKLIYFIDNKDLQGVYKTPLFVAAVCTDWIQNASAQDKFQDVTLFQSY
MQYLSLKYKATAEPLQATVSSCGQLALTGLFSSCFEFNSDDLAEAGVDEDEKLTLLMSKFTAQRLR
PVYRFLGPLFQEFLLAAVRLTELLSSDRQEDQDLGLYYLRQIDSPLKAINSFNIFLYYVSSHSSSKAAPT
VVSHLLQLVDEKESLENMSENEDYMKLHPQTFLWFQFVRGLWLVSPSSSSSFVSEHLLRLALIFAYE
SNTVAECSPFILQFLRGKTLALRVNLQYFRDHPESLLLLRSLKVSINGNKMSSYVDYSFKTYFENLQ
PPAIDEEYTSFAFEHISEWRRNFAQDEEIIKNYENIRPRALPDISEGYWKLSPKPKIPKLEVQVNNTDA
ADQALLQVLMVEVFSASQSIEFRLFNSSGFLESICPALELSKASVTKCSMSRLELSRAEQELLLTLPALQ
SLEVSETNQLPEQLFHNLHKFLGLKELCVRLDGKPNVLSVLPREFPNLLHMEKLSIQTSTESDLSKLV
KFIQNFNPNLHVFLKCDFLSNCESLMAVLASCKKLREIEFSGRCFEAMTFVNILPNFVSLKILNLKDQQ



FPDKETSEKFAQALGSLRNLEELLVPTGDGIHQVAKLIVRQCLQLPCLRVLTFFHDILDDDSVIEIARAAT
SGGFQKLENLDISMNHKITEEGYRNFFQALDNLPNLQELNICRNIPGRIQVQATTVKALGQCVSRLPS
LIRLHMLSLLDEEDMKVINDVKERHPQSKRLIIFWKLIVPFSPVILE

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Baculoviral IAP repeat-containing protein 1e (Neuronal apoptosis inhibitory protein 5) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Sensor component of the NLRC4 inflammasome that specifically recognizes and binds flagellin from pathogenic bacteria such as Legionella or Salmonella (PubMed:12526741, PubMed:21874021, PubMed:21918512, PubMed:29146805, PubMed:29182158). Association of pathogenic bacteria proteins drives in turn drive assembly and activation of the NLRC4 inflammasome, promoting caspase-1 activation, cytokine production and macrophage pyroptosis (PubMed:21874021, PubMed:21918512, PubMed:29146805, PubMed:29182158). The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria. The NLRC4 inflammasome senses Gram-negative bacteria such as L.pneumophila and P.aeruginosa, enteric pathogens S.typhimurium (Salmonella) and S.flexneri (PubMed:21874021, PubMed:21918512, PubMed:29146805, PubMed:29182158). May contribute to prevent motor-neuron apoptosis induced by a variety of signals (By similarity).

Subcellular Localization: N/A

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.