

Product datasheet for TP300245M

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

14-3-3 epsilon (YWHAE) (NM_006761) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human tyrosine 3-monooxygenase/tryptophan 5-monooxygenase

activation protein, epsilon polypeptide (YWHAE), transcript variant 1, 100 µg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC200245 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MDDREDLVYQAKLAEQAERYDEMVESMKKVAGMDVELTVEERNLLSVAYKNVIGARRASWRIISSIEQKE ENKGGEDKLKMIREYRQMVETELKLICCDILDVLDKHLIPAANTGESKVFYYKMKGDYHRYLAEFATGND RKEAAENSLVAYKAASDIAMTELPPTHPIRLGLALNFSVFYYEILNSPDRACRLAKAAFDDAIAELDTLS

EESYKDSTLIMQLLRDNLTLWTSDMQGDGEEQNKEALQDVEDENQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 29 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

Bioactivity: In vitro ubiquitination assay (regulator) (PMID: <u>28212375</u>)

Co-immunoprecipitation (PMID: 28212375)

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

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.

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 006752





Locus ID: 7531

UniProt ID: <u>P62258</u>, <u>V9HW98</u>

RefSeq Size: 1827 Cytogenetics: 17p13.3 RefSeq ORF: 765

Synonyms: 14-3-3E; HEL2; KCIP-1; MDCR; MDS

Summary: This gene product belongs to the 14-3-3 family of proteins which mediate signal transduction

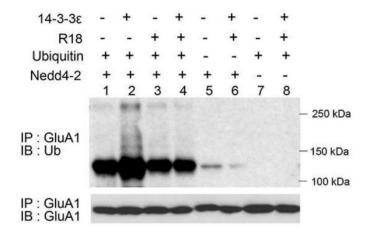
by binding to phosphoserine-containing proteins. This highly conserved protein family is found in both plants and mammals, and this protein is 100% identical to the mouse ortholog. It interacts with CDC25 phosphatases, RAF1 and IRS1 proteins, suggesting its role in diverse biochemical activities related to signal transduction, such as cell division and regulation of insulin sensitivity. It has also been implicated in the pathogenesis of small cell lung cancer. Two transcript variants, one protein-coding and the other non-protein-coding, have been

found for this gene. [provided by RefSeq, Aug 2008]

Protein Families: Druggable Genome

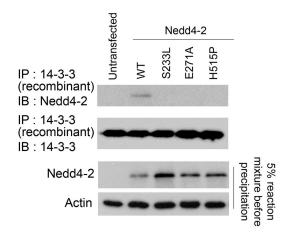
Protein Pathways: Cell cycle, Neurotrophin signaling pathway, Oocyte meiosis

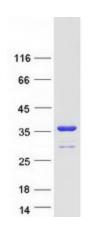
Product images:



Protein 14-3-3e enhances the ubiquitination of GluA1 by Nedd4-2. Samples from in vitro ubiquitination with recombinant GluA1 and Nedd4-2 in the presence or absence of recombinant 14-3-3e (OriGene [TP300245]), 14-3-3e inhibitor R18, or ubiquitin were immunoprecipitated with an anti-GluA1 antibody and analyzed in Western blots with Ub or GluA1 antibodies. Figure cited from PLoS Genet, PMID: 28212375







Three epilepsy-associated missense mutations (\$233L, E271A, H515P) of Nedd4-2 reduce the interaction between Nedd4-2 and 14-3-3e. Cell lysates prepared from HEK cells transfected with WT or mutant Nedd4-2s for 48 hours were incubated with recombinant 14-3-3e (OriGene [TP300245]) to pull down Nedd4-2, and the pulldown mixtures were analyzed in Western blots with Nedd4-2 and 14-3-3 (pan) antibodies. Right before the washing, 5% of the pulldown mixtures served as input controls shown on the bottom. Figure cited from PLoS Genet, PMID: 28212375

Coomassie blue staining of purified YWHAE protein (Cat# [TP300245]). The protein was produced from HEK293T cells transfected with YWHAE cDNA clone (Cat# [RC200245]) using MegaTran 2.0 (Cat# [TT210002]).