

## Product datasheet for TP300245

### 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, 20 µg   |
| Species:                              | Human   |
| Expression Host:                      | HEK293T   |
| Expression cDNA Clone or AA Sequence: | >RC200245 protein sequence<br><b>Red</b> =Cloning site <b>Green</b> =Tags(s)  |
|                                       | MDDREDLVYQAKLAEQAERYDEMVESMKKVAGMDVELTVEERNLLSVAYKNVIGARRASWRIISSIEQKE<br>ENKGGEDKMKMIREYRQMVETELKLICCDILDVLDKHLIPAANTGESKVFYKMKGDYHRYLAEFATGND<br>RKEAAENSLVAYKAASDIAMTELPPHPHPIRLGLALNFSVFYIEILNSPDRACRLAKAAFDDAIAELDTLS<br>EESYKDSTLIMQLLRDNLTLWTSDMQGDGEEQNKEALQDVEDENQ |
|                                       | <b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b>  |
| 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: <a href="#">28212375</a> )<br>Co-immunoprecipitation (PMID: <a href="#">28212375</a> )   |
| 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:                               | <a href="#">NP_006752</a>   |



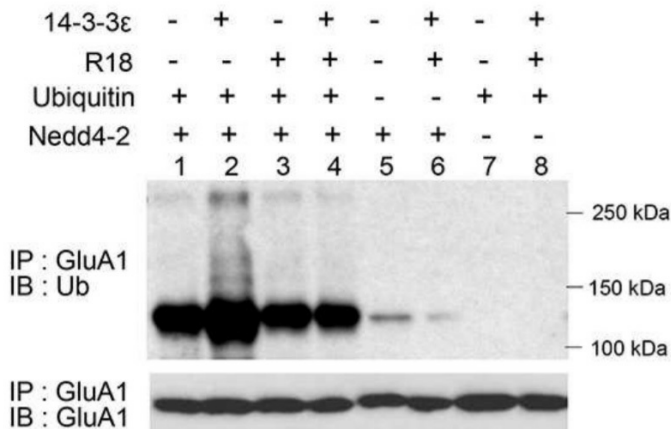
[View online »](#)

**Locus ID:** 7531  
**UniProt ID:** [P62258](#), [V9HW98](#)  
**RefSeq Size:** 1827  
**Cytogenetics:** 17p13.3  
**RefSeq ORF:** 765  
**Synonyms:** 14-3-3E; HEL2; KCIP-1; MDCR; MDS

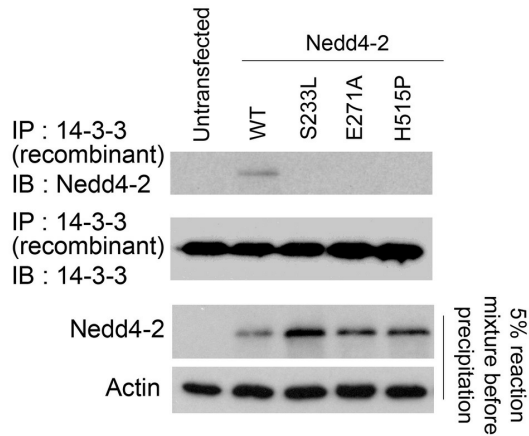
**Summary:** This gene product belongs to the 14-3-3 family of proteins which mediate signal transduction by binding to phosphoserine-containing proteins. This highly conserved protein family is found in both plants and mammals, and this protein is 100% identical to the mouse ortholog. It interacts with 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

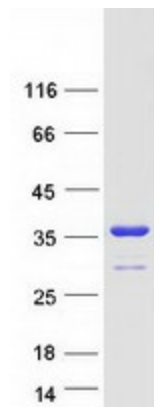
**Product images:**



Protein 14-3-3ε 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 14-3-3ε (OriGene TP300245), 14-3-3ε 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 (S233L, 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 pull-down mixtures were analyzed in Western blots with Nedd4-2 and 14-3-3 (pan) antibodies. Right before the washing, 5% of the pull-down 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]).