

# Product information

## 14-3-3 epsilon, 1-255 aa

Human, Recombinant, *E.coli*

Cat. No. IBYWE0701

**Full name:** Tyrosine 3-monooxygenase/ tryptophan 5-monooxygenase activation protein, epsilon polypeptide

**Synonyms:** YWHAE, MDS, MDCR, KCIP-1

**NCBI Accession No.:** NP\_006752

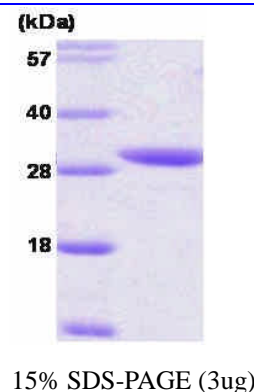
**Description:** The 14-3-3 family of proteins plays a key regulatory role in signal transduction, checkpoint control, apoptotic and nutrient-sensing pathways. 14-3-3 proteins are highly conserved and ubiquitously expressed. There are at least seven isoforms,  $\beta$ ,  $\gamma$ ,  $\epsilon$ ,  $\sigma$ ,  $\zeta$ ,  $\tau$  and  $\eta$  that have been identified in mammals. The 14-3-3 epsilon, a subtype of the 14-3-3 family of proteins, was thought to be brain and neuron-specific. It has been shown to interact 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. Recombinant human 14-3-3  $\epsilon$  was expressed in *E.coli* and purified by using conventional chromatography techniques.

**Form:** Liquid in 20 mM Tris pH 7.5

**Molecular Weight:** 29 kDa (255 aa), confirmed by MALDI-TOF

**Purity:** > 95% by SDS - PAGE

**Concentration:** 1 mg/ml (determined by Bradford assay)



### Sequences of amino acids:

MDDREDLVYQ AKLAEQAERY DEMVESMKKV AGMDVELTVE ERNLLSVAYK NVIGARRASW RI ISSIEQKE ENKGGEDKLK MIREYRQMV  
TELKLI CCDI LDVLDKHLIP AANTGESKVF YYKMKGDYHR YLAEFATGND RKEAAENSLV AYKAASDIAM TELPPTHPIR LGLALNFSVF  
YYEILNSPDR ACRLAKAAFD DAIAELDTLS EESYKDSTLI MQLLRDNLTL WTSMDQGDGE EQNKEALQDV EDENQ

### General references:

Oriente F, *et al.*(2005) *J Biol Chem.* 280(49):40642-9.

Conklin D, *et al.*(1995) *PNAS.* 92(17):7892-6

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.