# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-255aa

**UniProt No.** P62258

NCBI Accession No. NP\_006752.1

## **Alternative Names**

YWHAE, tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein epsilon, 14-3-3E, HEL2, KCIP-1, MDCR, MDS

# **PRODUCT SPECIFICATION**

## **Molecular Weight**

29 kDa (255aa) confirmed by MALDI-TOF

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

Formulation Liquid in. 20mM Tris-HCl buffer (pH 7.5)

Purity > 95% by SDS-PAGE

Tag Non-Tagged

Application SDS-PAGE

## **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

# BACKGROUND

## 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.

#### Amino acid Sequence

MDDREDLVYQ AKLAEQAERY DEMVESMKKV AGMDVELTVE ERNLLSVAYK NVIGARRASW RIISSIEQKE ENKGGEDKLK MIREYRQMVE TELKLICCDI LDVLDKHLIP AANTGESKVF YYKMKGDYHR YLAEFATGND RKEAAENSLV AYKAASDIAM TELPPTHPIR LGLALNFSVF YYEILNSPDR ACRLAKAAFD DAIAELDTLS EESYKDSTLI MQLLRDNLTL WTSDMQGDGE 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

#### DATA

#### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

