

AR51420PU-N

Human Bestrophin-1 (292-585, His-tag) - Purified

Alternate names:

BEST1, TU15B, VMD2, Vitelliform macular dystrophy protein 2

Quantity:

0.5 mg

Concentration:

1.0 mg/ml (determined by Bradford assay)

Background:

BEST1 is a member of the bestrophin gene family. This small gene family is characterized by proteins with a highly conserved N-terminus with four to six transmembrane domains. Bestrophins may form chloride ion channels or may regulate voltage-gated L-type calcium-ion channels. Bestrophins are generally believed to form calcium-activated chloride-ion channels in epithelial cells but they have also been shown to be highly permeable to bicarbonate ion transport in retinal tissue. Mutations in this gene are responsible for juvenile-onset vitelliform macular dystrophy (VMD2), also known as Best macular dystrophy, in addition to adult-onset vitelliform macular dystrophy (AVMD) and other retinopathies. Recombinant human BEST1 protein, fused to His-tag at N-terminus, was expressed in E.coli

Uniprot ID:

[O76090](#)

NCBI:

[NP_004174](#)

GenelD:

[7439](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >90% by SDS - PAGE

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol

Description:

AA Sequence:

MGSSHHHHH SGLVPRGSH MGSEQLINPF GEDDDDFETN WIVDRNLQVS LLAVDEMHQD
LPRMEPDYMW NKPEPQPPYT AASAFRRAS FMGSTFNISL NKEEMEFQPN QEDEEDAHAG
IIGRFLGLQS HDHPPRANS RTKLLWPKRE SLLHEGLPKN HKAQKQNVRG QEDNKAWKLK
AVDAFKSAPL YQRPGYYSAP QTPLSPTPMF FPLEPSAPSK LHSVTGIDTK DKSLKTVSSG
AKKSFELLSE SDGALMEHPE VSQVRRKTVE FNLTDMP EIP ENHLKEPLEQ SPTNIHTTLK
DHMDPYWALE NRDEAHS

Molecular weight: 36 kDa (317aa)

Storage:

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.
Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

Sodi A, Passerini I, et al. (2012). Mol Vis.18:2736-48.

Bitner H, Schatz P, et al. (2012). Am J Ophthalmol. 154(2):403-412.

Pictures:

