

**AR50084PU-N****Intein (3-518, His-tag) - Purified****Alternate names:**

Intein-CBD

**Quantity:**

0.5 mg

**Concentration:**

1 mg/ml (determined by Bradford assay)

**Background:**

Intein-CBD, also known as Intein, is a segment of a protein that is able to excise itself and rejoin the remaining portions with a peptide bond. Most reported inteins also contain an endonuclease domain that plays a role in intein propagation. In fact, many genes have unrelated intein-coding segments inserted at different positions. Since then, inteins have been found in all three domains of life (eukaryotes, bacteria, and archaea) and in viruses.

**NCBI:**[CAG28939](#)**Source:**

E. coli

**Format:****State:** Liquid purified protein**Purity:** >95% by SDS - PAGE**Buffer System:** 20 mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl**Description:**

Recombinant *Bacillus circulans* Intein, fused to His-tag at C-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

**N-terminal Sequence Analysis:** Met-Gly-Pro-Thr-Gly**AA Sequence:**

MKIEEGKLVI GSLEGCFKAG TNVLMADGSI ECIEENIEVGN KVMGKDGRPR EVIKLPRGRE  
TMYSVVQKSQ HRAHKS DSSR EVPELLKFTC NATHELVVRT PRSVRRLSRT IKGVEYFEVI  
TFEMGQKKAP DGRIVELVKE VSKSYPISEG PERANELVES YRKASNKAYF EWTIEARDLS  
LLGSHVRKAT YQTYAPILYE NDHFFDYMQK SKFHLTIEGP KVLAYLLGLW IGDGLSDRAT  
FSVDSRDTSL MERVTEYAEK LNLCAEYKDR KEPQVAKTVN LYSKVVRGAS TNPGVSAWQV  
NTAYTAGQLV TYNGKTYKCL QPHTSLAGWE PSNVPALWQL QGGHGGIRNN LNTENPLWDA  
IVGLGFLKDG VKNIPSFLLST DNIGTRETFLL AGLIDSDGYV TDEHGKATI KTIHTSVRDG  
LVSLARSLGL VVSVNAEPAK VDMNVTKHKI SYAIYMSGGD VLLNVLSKCA GSKKFRPAPA  
AAFARECRGF YFELQELKED DYYGITLSDD SDHQFLLGSQ VVVQNLEHHH HHH

**Molecular weight:** 59.4 kDa (533aa), confirmed by MALDI-TOF**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:**

1. Goqarten JP (2006) BMC Evol Biol. 13:6-94.

2. Anraku Y, Mizutani R, Satow Y. Protein splicing: its discovery and structural insight into novel chemical mechanisms. IUBMB Life. 2005 Aug;57(8):563-74. PubMed PMID: 16118114.

Pictures:

