

RPA011Bo01 1

Recombinant Brain Derived Neurotrophic Factor (BDNF)

Organism Species: *Bos taurus*; Bovine (Cattle)

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

12th Edition (Revised in Aug, 2016)

[PROPERTIES]

Source: Prokaryotic expression

Host: *E.coli*

Residues: Pro20~Arg250

Tags: N-terminal His Tag

Subcellular Location: Secreted

Purity: > 95%

Traits: Freeze-dried powder

Buffer formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Original Concentration: 200µg/mL

Applications: Positive Control; Immunogen; SDS-PAGE; WB.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 8.8

Predicted Molecular Mass: 27.3kDa

Accurate Molecular Mass: 32kDa as determined by SDS-PAGE reducing conditions.

Phenomenon explanation:

The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affect the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

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                P MKEANLRAQG SLAYPGVRTH GTLESMNGPK
VGSRGLTSSS  SLADTFEHVI  EELLDEDQKV  RPSEENKDA  DMYTSRVMLS
SQVPLEPPLL  FLLEEYKNYL  DAANMSMRVR  RHSDPARRGE  LSVCDISEW
VTAADKKTAV  DMSGGTVTVL  EKVPVSKGQL  KQYFYETKCN  PMGYTKEGCR
GIDKRHWNSQ  CRTTQSYVRA  LTMSKKRIG  WRFIRIDTSC  VCTLTIKRGR
    
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[IDENTIFICATION]

iGGATCCGAATTCCCATGAAAGAGGCAACGTCGAGGACAAAGGCAGCTTGGCCTAGCCAGGTGTGCGACCCATGGGACTCTGGAGAGCGTGAAATGGGCCCAGGCAGGTTCAAGAGGCTGACATGTCATCGTGGTGGGAGGACACTTTTGAAACAGTGATCGAGGAGCTGTTGGACGA

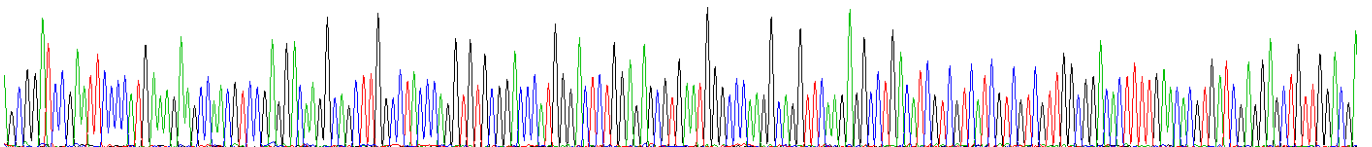


Figure. Gene Sequencing (Extract)

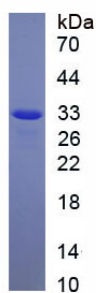


Figure. SDS-PAGE

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.