

RPA899Mu01 200µg
Recombinant Osteopontin (OPN)
Organism Species: Mus musculus (Mouse)
Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

12th Edition (Revised in Aug, 2016)

[**PROPERTIES**]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Val138~Asn294

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% sarcosyl, 5%Trehalose and Proclin300.

Original Concentration: 200ug/mL

Applications: SDS-PAGE; WB; ELISA; IP; CoIP; Purification; Amine Reactive Labeling.

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

Predicted isoelectric point: 4.9

Predicted Molecular Mass: 21.2kDa

Accurate Molecular Mass: 35kDa 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 affects 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]

VDV PNGRGDSLAY

GLRSKRSRFQ VSDEQYPDAT DEDLTSHMKS GESKESLDVI PVAQLLSMPS
 DQDNNGKGS HESSQLDEPSL ETHRLEHSKE SQESADQSDV IDSQASSKAS
 LEHQSHKFHS HKDKLVLPK SKEDDRYLKF RISHELESS SEVN

[IDENTIFICATION]

GTGATGATCCCAACGGCCAGGTCATACCTTGGCTATAGGACTGAGGTCAAGTCTAGGAGTTTCGAGTTTCTGTGACAGTATCTGATGCCACAGGTGAGGACTCACCTCTCACATGAGAGCGGTGAGTCTANGAGTCCCTCATATCTATCCCTTTCCCGACCTTCTGAGGTGCGCTCTGATCGGACAAAGAGGAAK
 V D V P N G R G D S L A Y G L R S K R S R S F Q V S D E Q I P D A T G E D L T S H K S G E S K E S L D V I P V A Q L L S H P S D Q D H H G K

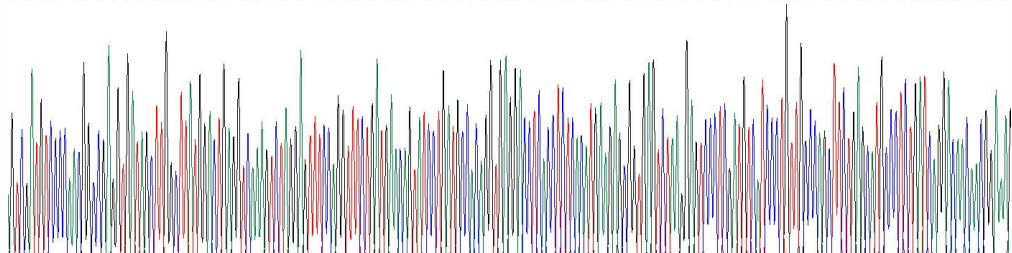


Figure 1. Gene Sequencing (Extract)

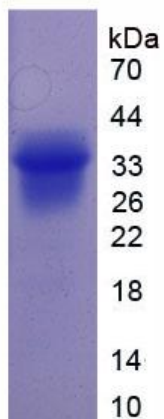


Figure 2. SDS-PAGE