RPA350Mu01 50μg
Recombinant Collagen Type I Alpha 1 (COL1a1)
Organism Species: Mus musculus (Mouse)
Instruction manual

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

10th Edition (Revised in Jan, 2014)

[PROPERTIES]

Residues: Lys1225~Val1453

Tags: N-terminal His-Tag

Accession: P11087

Host: *E. coli*

Subcellular Location: Secreted, extracellular space, extracellular matrix.

Purity: >95%

Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).

Formulation: Supplied as lyophilized form in PBS, pH7.4, containing 1mM DTT, 5% trehalose, 0.05% sarcosyl and preservative.

Predicted isoelectric point: 6.2

**Predicted Molecular Mass:** 28.0kDa

Accurate Molecular Mass: 33kDa as determined by SDS-PAGE reducing conditions.

Applications: SDS-PAGE; WB; ELISA; IP.

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

Note: 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.
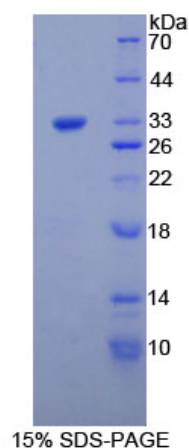
[USAGE]

Reconstitute in sterile PBS, pH7.2-pH7.4.

[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 of the target protein. 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. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCES]

The sequence of the target protein is listed below.

KSLSQQ IENIRSPEGS RKNPARTCRD LKMCHSDWKS GEYWIDPNQG CNLDAIKVYC
NMETGQTCVF PTQPSVPQKN WYISPNPKEK KHVWFGESMT DGFPFEYGSE
GSDPADVAIQ LTFLRLMSTE ASQNITYHCK NSVAYMDQQT GNLKKALLLQ GSNEIELRGE
GNSRFTYSTL VDGCTSHTGT WGKTVIEYKT TKTSRLPIID VAPLDIGAPD QEFGLDIGPA CFV

[REFERENCES]

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3. Harbers K., *et al.* (1984) Proc. Natl. Acad. Sci. U.S.A. 81:1504-1508.

4. Rhodes K., *et al.* (1994) Mol. Cell. Biol. 14:5950-5960.