

YBH757Ra01 10 μ g
Recombinant Klotho (KL)
Organism Species: Rattus norvegicus (Rat)
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: Leu517~Leu956

Tags: Two N-terminal Tags, His-tag and GST-tag

Accession: Q9Z2Y9

Host: *E. coli*

Subcellular Location: Cell membrane; Secreted. Single-pass type I membrane protein.

Purity: >95%

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

Formulation: Supplied as lyophilized form in 20mM Tris, 500mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% sarcosyl, 5% trehalose, and preservative.

Predicted isoelectric point: 6.4

Predicted Molecular Mass: 83.5kDa

Accurate Molecular Mass: 80kDa as determined by SDS-PAGE reducing conditions.

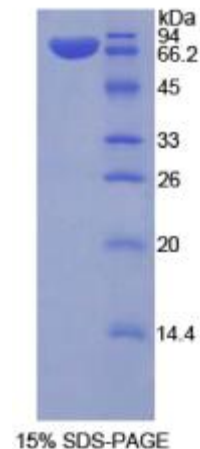
Applications: SDS-PAGE; WB; ELISA; IP.

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

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

Note:

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 ddH₂O.

[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.

LEGT FPCDFAWGVV DNYIQVDPTL SQFTDPNVYL WDVHHSKRLI KVDGVAKKR
KPYCVDFSAI RPQITLLREM RVTHFRFSLD WALILPLGNQ TQVNRTVLHF YRCMVSELVH
ANITPVVALW QPATPHQGLP HALAKHGAW E NPHTALAFAD YANLCFEELG HWVKFWITIN
EPNSRNMTYR AGHLLKAHA LAWHLYDDKF RAAQKGKISI ALQVDWIEPA CPFSQKDKEV
AERVLEFDVG WLAEPFIGSG DYPHVMREWL NQKNNFLLPY FTEDEKKLIR GSFDFLALSH
YTTILVDWEK EDPIKYNDYL EVQEMTDITW LNSPNQVAVV PWGLRKALNW LRFKYGDLP
FVTANGIDDD PHAEQDSLRLM YYIKNYVNEA LKAYVLDGIN LCGYFAYSLS DRSPVKSGFY
RYAANQFEPK PSIKHYRKII DNNGFL

[REFERENCES]

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2. Aizawa H., *et al.* (1998) *Biochem. Biophys. Res. Commun.* 249:865-871.
3. Kato Y., *et al.* (2000) *Biochem. Biophys. Res. Commun.* 267:597-602.
4. Nagai R., *et al.* (2000) *Cell. Mol. Life Sci.* 57:738-746.