

Recombinant E.coli Lon Protease, His-tagged

Cat. No. lon-90E Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant E. coli Lon Protease is produced by E.coli transformed with a plasmid containing sequence (Asn2-Lys784) of E. coli Lon Protease fused with a polyhistidine tag at the C-terminus.
Species	E.coli
Source	E.coli
ProteinLength	2-784 a.a.
Description	Lon Protease, is a member of the Lon protease family. They are found in archaea, bacteria and eukaryotes. Lon protease is ATP-dependent serin protease that mediates the selective degradation of mutant and abnormal proteins as well as certain short-lived regulatory proteins, including some antitoxins. It required for cellular homeostasis and for survival from DNA damage and developmental changes induced by stress. It degrades polypeptides processively to yield small peptide fragments that are 5 to 10 amino acids long and binds to DNA in a double-stranded, site-specific manner. Endogenous substrates include the regulatory proteins RcsA and Sula, the transcriptional activator SoxS, and UmuD. Its overproduction specifically inhibits translation through at least two different pathways, one of them being the YoeB-YefM toxin-antitoxin system.
Form	Supplied as a 0.2 µM filtered solution of 50mM Tris-HCl, 100mM KCl, 10% Glycerol, pH 7.5

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

AA Sequence

MGNPERSERIEIPVLPLRDVVVYPHVIPLFVGREKSIRCLEAAMDHDKKIMLVAQKE
 ASTDEPG VNDLFTVGTVASILQMLKLPDGTVKVLVEGLQRARISALSDNGEHFSAKA
 EYLESPTIDEREQEV LVRTAISQFEGYIKLNKKIPPEVLTSLNSIDDPARLADTIAAHM
 PLKLADKQSVLEMSDVNERLE YLMAMMESEIDLLQVEKRIRNRVKKQMEKSQREYY
 LNEQMKAIQKELGEMDDAPDENEALKRKID AAKMPKEAKEKAEAEELQKLKMMSPM
 SAEATVVRGYIDWMVQVPWNARSKVKDLRQAQEILDTDH YGLERVKDRILEYLAV
 QSRVNIKGPILCLVGPPGVGKTSLGQSIKATGRKYVRMALGGVRDEA EIRGHRR
 TYIGSMPGKLIQKMAKVGKVNPLFLLDEIDKMSSDMRGDPASALLEVLDPEQNVAFS
 D HYLEVDYDLSDVMFVATSNSMNIPALLDRMEVIRLSGYTEDEKLNIAKRHLLPKQI
 ERNALKKG ELTVDDSAIIGIIRYYTREAGVRGLEREISKLCRKAVKQLLLDKSLKHIEIN
 GDNLHDYLGVQRF DYGRADNENRVGQVTGLAWTEVGGDLLTIETACVPGKGKLT
 TGSLGEVMQESIQAALTVVRARA EKLGINPDFYEKRDIVHVPEGATPKDGPSAGIA
 MCTALVSCLTGNPVRADVAMTGEITLRGQVL PIGGLKEKLLAAHRGGIKTVLIPFENK
 RDLEEIPDNVIADLDIHPVKRIEEVLTALQNEPSGMQ VVTAKLEHHHHHH

Endotoxin

Less than 0.1 ng/g (1 IEU/g).

Purity

Greater than 95% as determined by SEC-HPLC and reducing SDS-PAGE.

Storage

Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.