

## 32-7101: Recombinant E. coli Lon Protease (C-6His)(Discontinued)

**Gene :** lon  
**Gene ID :** 945085  
**Uniprot ID :** P0A9M0

### Description

Source: E.coli.  
MW :88.6kD.

Recombinant E.coli Lon Protease is produced by our E.coli expression system and the target gene encoding Asn2-Lys784 is expressed with a 6His tag at the C-terminus. Lon Protease, is a member of the Lon protease family. They are found in archaea, bacteria and eukaryotes. Lon protease is ATP-dependent serine 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.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of 50mM TrisHCl, 100mM KCl, 10% Glycerol, pH 7.5 .  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** MGNPERSERIEIPVLPLRDVVVYPHVMVPLVFGREKSIRCLEAAMDHDKKIMLVAQKEASTDEPGVNDLFTVGTV  
ASILQMLKLPDGTVKVLVEGLQRARISALSDNGEHFSAKAEYLESPTIDEREQEVLRVTAISQFEGYIKLNKKIPPE  
VLTSLSNIDDPARLADTIAAHMPLKLADKQSVLEMSDVNERLEYLMAMMESEIDLLQVEKRIRNRVKKQMEKSQ  
REYLLNEQMKAIQKELGEMDDAPDENEALKRKRIDAAMPKEAKEAEELQKLMMSPMSAEATVVRGYIDW  
MVQVPWNARSKVKKDLRQAQEILDTDHYGLERVKDRILEYLAVQSRVKNKIKGPILCLVGPVGGKTSLGQSIK  
ATGRKYVRMALGGVRDEAEIRGHRRTYIGSMPGKLIQKMAKVGKVNPLFLLDEIDKMSSDMRGDPASALLEVL  
DPEQNVAFSDHYLEVDYDLSDVFMVATSNMNIAPLLDRMEVIRLSGYTEDEKLNIAKRHLLPKQIERNALKKG  
ELTVDDSAIIGIIRYYTREAGVRLEREISKLCRKAVKQLLLDKSLKHIEINGDNLHDYLGVQRFQDYGRADNENRV  
GQVTGLAWTEVGGDLLTIETACVPGKGLTYTGSLEVMQESIQAALTVVRARAELGINPDFYEKRDIVHVP  
EGATPKDGPAGIAMCTALVSCLTGNPVRADVAMTGEITLRGQVLPVIGLKEKLLAAHRGGIKTVLIPFENKRD  
EEIPDNVIADLDIHPVKRIEEVLTALQNEPSGMQVVTAKLEHHHHHHH

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.  
**Biological Activity :** Specific Activity is greater than 0.083mg casein/mg enzyme/min