

Recombinant E.coli Lon Protease, His-tagged

SPECIFICATION

Cat.No.	lon-90E
Species	E. coli
Product Name	Recombinant E.coli Lon Protease, His-tagged
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.
Description	<p>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.</p>
Source	E. coli
Tag	His
Form	Supplied as a 0.2 μ M filtered solution of 50mM Tris-HCl, 100mM KCl, 10% Glycerol, pH 7.5
AA Sequence	<p>MGNPERSERIEIPVLPLRDVVVYPHMPVIPLFVGREKSIRCLEAAMDHDKKIMLVAQKEA STDEPG VNDLFTVGTVASILQMLKLPDGTVKVLVEGLQRARISALSDNGEHFSAKAE YLESPTIDEREQEV LVRTAISQFEGYIKLNKKIPPEVLTSLNSIDDPARLADTIAAHMPL KLADKQSVLEMSDVNERLE YLMAMMESEIDLLQVEKRIRNRVKKQMEKSQREYYLN EQMKAIQKELGEMDDAPDENEALKRKID AAKMPKEAKEKAEAEELQKLKMMSPMSAE ATVVRGYIDWMVQVPWNARSKVKKDLRQAQEILDTH YGLERVKDRILEYLAVQSR</p>

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VNLIKGPILCLVGPPGVGKTSLGQSIKATGRKYVRMALGGVRDEA EIRGHRRTYIGS
MPGKLIQKMAKVGKVNPLFLLDEIDKMSSDMRGDPASALLEVLDPEQNVAFSD HYLE
VDYDLSDVMFVATSNSMNIPAPLLDRMEVIRLSGYTEDEKLNIAKRHLLPKQIERNALK
KG ELTVDDSAIIGIIRYYTREAGVRGLEREISKLCRKAVKQLLLDKSLKHIEINGDNLHD
YLGVQRF DYGRADNENRVGQVTGLAWTEVGGDLLTIETACVPGKGKLTYTGSLGEV
MQESIQAAALTVVRARA EKLGINPDFYEKRDIVHVPEGATPKDGPSAGIAMCTALVSC
LTGNPVRADVAMTGEITLRGQVL PIGGLKEKLLAAHRGGIKTVLIPFENKRDLEEIPDN
VIADLDIHPVKRIEEVLTLALQNEPSGMQ VVTAKLEHHHHHH

Endotoxin	Less than 0.1 ng/μg (1 IEU/μg).
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.