



Recombinant Human Three-prime repair exonuclease 1 (TREX1)

Product Code	CSB-BP865133HU
Relevance	<p>Major cellular 3'-to-5' DNA exonuclease which digests single-stranded DNA (ssDNA) and double-stranded DNA (dsDNA) with mismatched 3' termini. Prevents cell-intrinsic initiation of autoimmunity. Acts by metabolizing DNA fragments from endogenous retroelements, including L1, LTR and SINE elements. Unless degraded, these DNA fragments accumulate in the cytosol and activate the IFN-stimulatory DNA (ISD) response and innate immune signaling. Prevents chronic ATM-dependent checkpoint activation, by processing ssDNA polynucleotide species arising from the processing of aberrant DNA replication intermediates. Inefficiently degrades oxidized DNA, such as that generated upon antimicrobial reactive oxygen production or upon absorption of UV light. During GZMA-mediated cell death, contributes to DNA damage in concert with NME1. NME1 nicks one strand of DNA and TREX1 removes bases from the free 3' end to enhance DNA damage and prevent DNA end reannealing and rapid repair.</p>
Abbreviation	TREX1
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9NSU2
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	<p>MGPGARRQGRIVQGRPEMCFPPPTPLPLRLILTLGHTHTPTPCSSPGSAAGTY PTMGSQALPPGPMQTLIFFDMEATGLPFSQPKVTELCLLAVHRCALSPPTSQ GPPPTVPPPPRVVDKLSLCVAPGKACSPAASEITGLSTAVLAAHGRQCFDDNL ANLLLAFLRRQPQPWCLVAHNGDRYDFLLQAEMLGLTSALDGAFCVDSIT ALKALERASSPSEHGPRKSYSLGSIYTRLYGQSPDSTAEGDVLALLSICQW RPQALLRWVDAHARPFGTIRPMYGVTASARTKPRPSAVTTTAAHLATTRNTSPS LGESRGTKDLPPVKDPGALSREGLLAPLGLLAILTLAVATLYGLSLATPGE</p>
Research Area	Epigenetics and Nuclear Signaling
Source	Baculovirus
Target Names	TREX1
Protein Names	3'-5' exonuclease TREX1 (Deoxyribonuclease III) (DNase III)
Expression Region	1-369aa



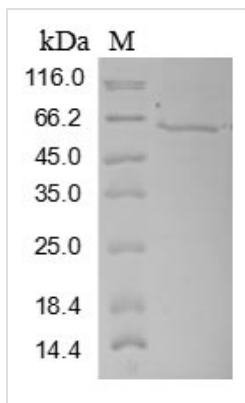
Notes Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Tag Info N-terminal MBP-tagged and C-terminal 6xHis-tagged

Mol. Weight 82.9 kDa

Protein Length Full Length

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Shelf Life

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