

Product Datasheet

Recombinant Human NLRP3/NALP3 GST (N-Term) Protein H00114548-P01-2ug

Unit Size: 2 ug

Store at -80C. Avoid freeze-thaw cycles.

www.novusbio.com



technical@novusbio.com

Publications: 10

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/H00114548-P01

Updated 10/23/2024 v.20.1

Earn rewards for product
reviews and publications.

Submit a publication at www.novusbio.com/publications

Submit a review at www.novusbio.com/reviews/destination/H00114548-P01



H00114548-P01-2ug**Recombinant Human NLRP3/NALP3 GST (N-Term) Protein**

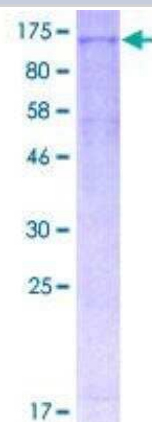
Product Information	
Unit Size	2 ug
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at -80C. Avoid freeze-thaw cycles.
Preservative	No Preservative
Purity	>80% by SDS-PAGE and Coomassie blue staining
Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH 8.0 in the elution buffer.
Target Molecular Weight	144.6 kDa
Product Description	
Description	A recombinant protein with GST tag at N-terminal corresponding to the amino acids 1-1036 of Human NLRP3 Source: <i>Wheat Germ (in vitro)</i> Amino Acid Sequence: MKMASTRCKLARYLEDLEDVDLKKFKMHLEDYPPQKGCIPLRGQTEKADHVD LATLMIDFN GEEKAWAMAVWIFAAINRRDLYEKAKRDEPKWGS DNARVSNPTV ICQEDSIEEEWMGLLEYLSRISICKMKKDYRK KYRKYVRSRFQCIEDRNARLGE SVSLNKRYTRLRLIKEHRSQQEREQELLAIGKTKTCESPVSPIKMELLFDPDDEH SEPVHTVVFQGAAGIGKTI LARKMMLDWASGTL YQDRFDYLFYIHCREVSLVTQ RSLGDLIMSCCPDPNPPIHKIVRKPSRILFLMDGFDELQGA FDEHIGPLCTDWQ KAERGDILLSSLIRKKLLPEASLLITTRPVALEKLQHLLDHPRHVEILGFSEAKRK EYFFKYFSDEA QARAAFSLIQENEVLFTMCFIPLVCWIVCTGLKQQMESGKSLA QTSKTTTAVYVFFLSSLLQPRGGSQEHLCAHLWGLCSLAADGIWNQKILFEE SDLRNHGLQKADVSAFLRMNLFQKEVDCEKFYSFIHMTFQEFFAAMYLLLEE KEGRTNVP GSRLKLPSRDVTVLLENYGKFEKG YLIFVVRFLFGLVNQERTSYLE KKLSCKISQQIRLELLKWIEVKAKAKKLQIQPSQLELFYCLYEMQEEDFVQRAM DYFPKIEINLSTRMDH MVSSFCIENCHRVESLSLGLHNMPKEEEEEKEGRHL DMVQCVLPSSSHAACSHGLVNSHLTSSFCRGLFSVLSTSQSLTELDSLSDNSLG DPGMRVLCETLQH PGCNIRRLWLGRCGLSHECCFDISLVSSNQKLVELDLSD NALGDFGIRLLCVGLKHLLCNLKKLWLVSCCLTSACCQDLASVLSTSHSLTRLY VGENALGDSGVAILCEKAKNPQC NLQKLGLVNSGLTSVCCSALSSVLSTNQNL THLYLRGNTLGDKGIKLLCEGLLHPDCKLQVLELDNCNLTS HCCWDLSTLLTSS QSLRKLSLGNNDLGD LGVMMMFCEVLKQQSCLLQNLGLSEMYFNYETKSALETL QEEKPELTVVFEP SW
Gene ID	114548
Gene Symbol	NLRP3
Species	Human
Preparation Method	in vitro wheat germ expression system
Details of Functionality	This protein was produced in an in vitro wheat germ expression system that should preserve correct conformational folding that is necessary for biological function. While it is possible that this protein could display some level of activity, the functionality of this protein has not been explicitly measured or validated.
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.



Product Application Details	
Applications	Western Blot, ELISA, Protein Array, SDS-Page, Immunoaffinity Purification
Recommended Dilutions	Western Blot, ELISA, SDS-Page, Protein Array, Immunoaffinity Purification
Application Notes	Use in functional assay reported in scientific literature (PMIDs: 23871209 & 29531021)

Images

SDS-Page: Recombinant Human NLRP3/NALP3 Protein [H00114548-P01] - 12.5% SDS-PAGE stained with Coomassie Blue.



Publications

Zsófia Agnes Bittner, Xiao Liu, Maria Mateo Tortola, Ana Tapia-Abellán, Sangeetha Shankar, Liudmila Andreeva, Matthew Mangan, Marianne Spalinger, Hubert Kalbacher, Peter Düwell, Marta Lovotti, Karlotta Bosch, Sabine Dickhöfer, Ana Marcu, Stefan Stevanović, Franziska Herster, Yamel Cardona Gloria, Tzu-Hsuan Chang, Francesca Bork, Carsten L Greve, Markus W Löffler, Olaf-Oliver Wolz, Nadine A Schilling, Jasmin B Kümmerle-Deschner, Samuel Wagner, Anita Delor, Bodo Grimbacher, Oliver Hantschel, Michael Scharl, Hao Wu, Eicke Latz, Alexander N R Weber BTK operates a phospho-tyrosine switch to regulate NLRP3 inflammasome activity. *The Journal of experimental medicine* 2021-12-07 [PMID: 34554188]

Ling-Ya C, Duen-Yi H, Wan-Wan L et al. PARP-1 regulates inflammasome activity by poly-ADP-ribosylation of NLRP3 and interaction with TXNIP in primary macrophages. *Cell Mol Life Sci.* 2022-01-30 [PMID: 35098371]

Huang Y, Jiang H, Chen Y et al. Tranilast directly targets NLRP3 to treat inflammasome-driven diseases *EMBO Mol Med* 2018-03-12 [PMID: 29531021] (Func, Human)

Ambite I, Puthia M, Nagy K et al. Molecular Basis of Acute Cystitis Reveals Susceptibility Genes and Immunotherapeutic Targets. *PLoS Pathog* 2016-10-12 [PMID: 27732661]

Shi H, Wang Y, Li X et al. NLRP3 activation and mitosis are mutually exclusive events coordinated by NEK7, a new inflammasome component. *Nat Immunol* 2015-12-07 [PMID: 26642356]

Lu B, Nakamura T, Inouye K et al. Novel role of PKR in inflammasome activation and HMGB1 release. *Nature.* 2012-07-08 [PMID: 22801494]

Bruchard M, Mignot G, Derangere V et al. Chemotherapy-triggered cathepsin B release in myeloid-derived suppressor cells activates the Nlrp3 inflammasome and promotes tumor growth. *Nat Med.* 2012-12-02 [PMID: 23202296]

He Y, Varadarajan S, Munoz-Planillo R et al. 3,4-Methylenedioxy-b-nitrostyrene inhibits NLRP3 activation by blocking assembly of the inflammasome. *J Biol Chem.* 2013-11-21 [PMID: 24265316]

Cocco M, Garella D, Di Stilo A et al. Electrophilic Warhead-Based Design of Compounds Preventing NLRP3 Inflammasome-Dependent Pyroptosis. *J Med Chem.* 2014-12-04 [PMID: 25418070]

Mitoma H, Hanabuchi S, Kim T, et al. The DHX33 RNA Helicase Senses Cytosolic RNA and Activates the NLRP3 Inflammasome. *Immunity* 2013-07-25 [PMID: 23871209] (Func)





Novus Biologicals USA

10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada

21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to H00114548-P01-2ug

NBP1-77080PEP	NLRP3/NALP3 Antibody Blocking Peptide
201-LB-005	IL-1 beta/IL-1F2 [Unconjugated]
NBP2-12446	NLRP3/NALP3 Antibody - BSA Free
NB100-56565	Caspase-1 Antibody (14F468) - BSA Free

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Peptides and proteins are guaranteed for 3 months from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/H00114548-P01

Earn gift cards/discounts by submitting a publication using this product:
www.novusbio.com/publications

