

Recombinant Mouse LYST Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51517

Size: 10ug, 100ug

Protein Name: Lysosomal-trafficking regulator (Beige protein) (CHS1 homolog)

Synonym: Lyst, Bg, Chs1

UniProt ID: P97412

UniProt Link: www.uniprot.org/uniprotkb/P97412/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 3788 AA

Molecular Weight: 425 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSTDNSNLAREFLIDVNQLCNAVVRQAEAREEEEEETHMATLGQYLVHGRGFLLLTKLNSIIDQALTC
REELLTLLLSLLPLVWKIPVQEQQATDFNLPLSSDIILTEKNSSLQKSTQGKLYLEGSAPSGQVSAKV
NLFRKIRRQRKSTHRYSVRDARKTQLSTSDSEGNSEKSTVVSXKRRRLHALPRFLTQSPKEGHLVA
KPDPSATKEQVLSDTMSVENSREVILRQDSNGDILSEPAALSILSNMNNSPFDLCHVLLSLLEKVCKF
DIALNHNSSLALSVVPTLTEFLAGFGDCCNQSDTLEGQLVSAGWTEEPVALVQRMLFRTVLHLMSVD
VSTAEAMPESLRKNLTLLRAALKIRACLEKQPEPFSPRQKKTLEVQEGFVFSKYRHRALLPELLE
GVLQLLISCLQSAASNPYFYSQAMDLVQEFIQHQGFNLFGTAVLQMEWLLTRDGVPSAEAEHLKALI
NSVIKIMSTVKKVKSEQLHSMCTKRHRRCESYSHFMQHHRDLSGLLVSAFKNQLSKSPFEETAEG
DVQYPERCCCAVCAHQCLRLQQVSLSTTCVQILSGVHSVIGCCCMDPKSVIAPLLHAFKLPALKAF
QQHILNVLSKLLVDQLGGAELSPRIKKAACNICTVDSQDLAKLGETLQGTLCGAGPTSGLPSPSYRFQ
GILPSSGSEDLLWKWDALEAYQSFVFQEDRLHNIQIANHICNLLQKGNVVVQWKLYNYIFNPVLQRG
VELVHHCCQLSIPSAQTHMCSQLKQYLPQEVLLQYLTLPVLLKSRVIRDLFLSCNGVNHIIELNYLDGI
RSHSLKAFETLIVSLGEQQKDAAVLDVDGLDIQQELPSLSVGPSLHKQQASSDSPCSLRKFYASLRE
PDPKKRKTIHQDVHINTINLFLCVAFLCVSKEADSDRESANESEDTSGYDPPSEPLSHMLPCLSLED
VVLPSPECLHHAADIWSMCRWIYMLNSVFQKQFHLRGGFQVCHELIFMIIQKLFRSHTEDQGRRQGE
MSRNENQELIRISYPELTGKGDVSSATAPDLGFLRKSADSVRGFQSQPVLPSTAEQIVATESVPGERK
AFMSQQSETSLQSIRLLESLLDICLHSARACQKMELELPSQGLSVENILCELREHLSQSKVAETELA
KPLFDALLRVALGNHSADLGPDAVTEKSHPSSEEEELLSQPGDFSEEAEDSQCCSLKLLGEEEGYEA
DSESNPEDVDTQDDGVELNPEAEGFSGSIVSNLLLENLTHGEIITYPEICMLGLNLLSASKAKLDVLAH



VFESFLKIVRQKEKNISLLIQQGTVKILLGGFLNILTQTNSDFQACQRVLDLLVSLMSSRTCSEDLTLL
WRIFLEKSPCTEILLGGIHKIVESDFTMSPSQCLTFPFLHTPSLSNGVLSQKPPGILNSKALGLLRRARI
SRGKKEADRESFPYRLLSSWHIAPIHLPLLGQNCWPHLSEGFSSVSLVGLMWNTSNESESAAERGKR
VKKRNKPSVLEDSSFEAGAEGDRPEVTESINPGDRLIEDGCIHLISLGSKALMIQVWADPHSGTTFIFRV
CMDSNDDTKAVSLAQVESQENIFFPSKWQHLVLTIQHPQGKKNVHGEISIWVSGQRKTDVILDFVL
PRKTSLSDDSNKTFMIGHCLTSQEESLQLAGKWDLGNLLFNNGAKIGSQEAFFLYACGPNYTSIMP
CKYGQPVIDYSKYINKDILRCDEIRDLFMTKKEVDVGLLIESLSVVYTTCCPAQYTIYEPVIRLKGQVKT
QPSQRPFSSEAKQSILLEPSQLKGLQPTHECKAIQGILHEIGGAGTFVFLFARVVELSSCEETQALALRV
ILSLIKYSQQRTQELCNCGLSMIHQVLVKQKCIVGFHILKTLLEGCCGEEVIHVSEHGEFKLDVESHAI
IQDVKLLQELLLDWKIWNKAEGGVWETLLAALEVLIRVEHHQQQFNIKQLLNAHVHHFLLTCQVLQE
HREGQLTSMPREVCRSFVKIAEVLGSPDLELLTVIFNLLAVHPPTNTYVCHNPTNFYFSLHIDGKIF
QEKVQSLAYLRHSSSGGQAFPSPGFLVISPSAFTAAPPEGTSSSNIVPQRMMAQMVRSLPAFPTY
LPLIRAQKLAASLGFSVDKLQNIADANPEKQNLGRPYALKTSKEEAFISSCESAKTVCEMEALLGAH
ASANGVSRGSPRFPARVDHKDVGTEPRSDDDSPGDESYPRRPDNLKGLASFQRSQSTVASLGLA
FPSQNGSAVASRWPSLVDRNADDWENFTFSPAYEASYNRATSTHSHVEDCLIPCCGLYELLSGVLL
VLPDAMLEDVMDRIIQADILLVLVNHPSPAIQQGVIKLLHAYINRASKEQKDKFLKNRGFSLLANQLYL
HRGTQELLECFVEMFFGRPIGLDEEFDLEEVDKHMELFQKWSVIPVLGLIETSLYDNVLLHNAALLLLQV
LNSCSKVADMLLDNGLLYVLCNTVAALNGLEKNIPVNEYKLLACDIQQLFIAVTIHACSSSGTQYFRVI
EDLIVLLGYLHNSKNKRTQNMALALQLRVLQAALEFIRSTANHDSSESPVHSPSAHRHSVPPKRRSIAG
SRKFPLAQTESLLMKMRSVASDELHSMQRRMSQEHPSQASEAELAQLRLTILAVNRIIYQELNS
DIIDILRTPENTSQSKTSVSQTEISEEDMHHEQPSVYNPFQKEMLTLYLLDGFVKVCIGSSKTSVSKQQW
TKILGSCKETLRDQLGRLLAHILSPTHTVQERKQILEIVHEPAHQDILRDCLSPSPQHGAKLVLVYLSLI
HNHQLDELSEEMDTAELLMNALKLCGHKCIPPSAPSKEPIKIIREEQKKYESEESVSKGSWQKTVN
NNQQSLFQRLDFKSKDISKIAADITQAVSLSQGIERKKVIQHIRGMYKVDLSASRHWQECIQQLTHDR
AVWYDPIYYPTSWQLDPTGPNRERRRLQRCYLTPNKYLLRDRQKSEGVLRPPLSYLFEDKTHSSF
SSTVKDKAASESIRVNRRCISVAPSRETAGELLGKCGMYFVEDNASDAVESSSLQGELEPASFSWT
YEEIKEVHRRWWQLRDNAVEIFLTNGRTLLAFDNNKVRDDVYQSILTNNLPNLEYGNITALTNLWY
SGQITNFEYLTHLNKHAGRSFNDLMQYPVFPFILSDYVSETLDLNDPSIYRNLSPKPIAVQYKEKEDRY
VDTYKYLEEEYRKGAREDDPMPPVQPYHYGSHYSNSGTVLHFLVRMPPFTKMFLAYQDQSFDPDR
TFHSTNTTWRLSSSFESMTDVKELIPEFFYLPEFLVNREGDFGVRQNGERVNHVNLPPWARNDPRL
FILIHRQALES DHVSQNICHWIDL VFGYKQKGKASVQAINVFHPATYFGMDVSAVEDPVQRRALETMI
KTYGQTPRQLFHTAHASRPGAKLNIEGELPAAVGLLVQFAFRETPVKEVTHPSPLSWIKGLKWGE
YVGSPSAPVPVVCFSQPHGERFGSLQALPTRAICGLSRNFCLLMTYNKEQGVRSMNNTNIQWSAIL
SWGADNLRKSKQSEPPINFQSSQQHQVTSCAWVPDSCQLFTGSKCGVITAYTNRLTSSTPSEIE
MESQMHLYGHTEETGLCVCKPYSVMISVSRDGTICVWDLNRLCYVQSLAGHKSPVTAVSASETSG
DIATVCD SAGGSDRLRLWTVNGDLVGHVHCREIICSVAFSNQPEGVSINVIAGGLENGIVRLWSTWD
LKPVREITFPKSNKPIISLTFSCDGHHLTYANSEGTVIAWCRKDQQRVKLPMFYSLSSYAAG

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Lysosomal-trafficking regulator (Beige protein) (CHS1 homolog) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Adapter protein that regulates and/or fission of intracellular vesicles such as lysosomes (By similarity). Might regulate trafficking of effectors involved in exocytosis (By similarity). In cytotoxic T-cells and natural killer (NK) cells, has role in the regulation of size, number and exocytosis of lytic granules (By similarity). In macrophages and dendritic cells, regulates phagosome maturation by controlling the conversion of early phagosomal compartments into late phagosomes (PubMed:27881733). In macrophages and dendritic cells, specifically involved in TLR3- and TLR4-induced production of pro-inflammatory cytokines by regulating the endosomal TLR3- TICAM1/TRIF and TLR4- TICAM1/TRIF signaling pathways (PubMed:27881733).

Subcellular Localization: Cytoplasm .

6. Notes

- Avoid repeated freeze- thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer- composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.