



Catalog Number: PR27242

Product Type: Recombinant Protein

Source: *E. Coli*

Amino Acid Sequence: MGSSHHHHHH SSGLVPRGSH MSAATHSPMM QVASGNGDRD PLPPGWEIKI DPQTGWPFV
DHNSRTTWN DPRVPSEGPK ETPSSANGPS REGSRLPPAR EGHPVYPQLR PGYIPIVLH
EGAENRQVHP FHVYPQGMQ RFRTEAAAAA PQRSQSPLRG MPETTQPDQK CGQVAAAAA
QPPASHGPER SQSPAASDCS SSSSSASLPS SGRSSLGSHQ LPRGYISIPV IHEQNVTRPA
AQPSFHQAQK THYPAQQGEY QTHQPVYHKI QGDDWEPRPL RAASPFRSSV QGASSREGSP
ARSSTPLHSP SPIRVHTVVD RPQQPMTHRE TAPVSQPENK PESKPGVGP ELPPGHIPIQ
VIRKEVDSKP VSQKPPPPSE KVEVKVPPAP VPCPPSPGP SAVPSSPKSV ATEERAAPST
APAEATPPKP GEAEAPPKHP GVLKVEAILE KVQGLEQAVD NFEGKKTDKK YLMIEEYLTK
ELLALDSVDP EGRADVRQAR RDGVRKVQTI LEKLEQK AID VPGQVQVYEL QPSNLEADQP
LQAIMEMGAV AADKGKKNAG NAEDPHTETQ QPEATAAATS NPSSMTDTPG NPAAP.

Description/Molecular Mass: BAG3 Inhibits the chaperone activity of HSP70/HSC70 by promoting substrate release. BAG3 has anti-apoptotic activity. BAG proteins participate with Hip for their binding to Hsc70/Hsp70 ATPase domain and encourage substrate release. BAG proteins have about 45 amino acid BAG domain close to the C terminus however they differ noticeably in their N-terminal regions. BAG3 includes a WW domain in the N-terminal region and a BAG domain in the C-terminal region. The BAG domains of BAG1, BAG2, and BAG3 interact particularly with the Hsc70 ATPase domain in vitro and in mammalian cells. They bind with high affinity to the ATPase domain of Hsc70 and inhibit its chaperone activity in a Hip-repressible manner. BAG3 plays a role as a protein-refolding cochaperone of the bcl2 binding protein BAG family and as upregulated in response to persistent stress of cellular calcium balance dysregulation. BAG3 has been shown to diminish stress-induced apoptosis.

BAG3 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 595 amino acids (1-575 a.a.) and having a molecular mass of 63.7 kDa. The BAG3 protein is fused to a 20 amino acid His Tag at N-terminus and purified by standard chromatography techniques.

Purity: Greater than 90.0% as determined by:
(a) Analysis by SDS-PAGE.

Format: The BAG3 protein contains 20mM Tris buffer pH-8, 1mM EDTA, 10% glycerol and 0.1mM PMSF.

Storage: Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

FOR RESEARCH USE ONLY

NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

03/08v1

www.neuromics.com

Neuromics • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail pshuster@neuromics.com