

Product datasheet

Recombinant human c-Myc (mutated T73A) protein ab135024

Description

Product name	Recombinant human c-Myc (mutated T73A) protein	
Biological activity	DNA binding activity was demonstrated using cMyc specific DNA binding oligo derived ELISA. Mouse iPS generation activity was measured for each lot of products.	
Purity	> 90 % SDS-PAGE. ab135024 was expressed in E. coli as inclusion bodies, refolded using temperature shift inclusion body refolding technology and chromatographically purified.	
Expression system	Escherichia coli	
Accession	<u>P01106-2</u>	
Protein length	Full length protein	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	<p>MDFFRVVENQQPPATMPLNVSFNTRNYDLDYDSVQPYFY CDEEENFYQQQ QQSELQPPAPSEDWKKFELLPAPPLSPSRRSGLCSPSY VAVTPFSLRGD NDGGGGSFSTADQLEMVTELLGGDMVNQSFICDPDET IKNIIQDCMW SGFSAAAKLVSEKLASYQAARKDSGSPNPARGHSVCST SSLYLQDLSAAA SECIDPSVVFYPLNDSSSPKSCASQDSSAFSPSSDLL SSTESSPQGSP EPLVLHEETPPTTSSDSEEEQEDEEIDVVSVEKRQAPG KRSEGSAG GHSKPPHSPLVLRCHVSTHQHNYAAPPSTRKDYPAAKR VKLDSVRVLRQ ISNNRKCTSPRSSDTEENVKRRTHNVLERQRRNELKRFF ALRDQIPELE NNEKAPKVILKKATAYILSVQAEEQKLISEEDLLRKRREQ LKHKLEQLR NSCAESGGGGSPGRRRRRRRRRRRR</p>	
Predicted molecular weight	53 kDa including tags	
Amino acids	1 to 454	

Specifications

Our **Abpromise guarantee** covers the use of **ab135024** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications

SDS-PAGE

Functional Studies

Form

Liquid

Additional notes

Incubating ab135024 in culture mediums at concentration of 8 µg/ml may be used for protein derived iPS (PiPS) generation when combined with Oct4-11R, Sox2-11R and Klf4-11R.

Preparation and Storage

Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: Potassium chloride, 0.05% DTT, 0.32% Tris HCl, 0.02% EDTA, Glycerol, Sodium chloride, 3.4% DL-Arginine

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function

Participates in the regulation of gene transcription. Binds DNA in a non-specific manner, yet also specifically recognizes the core sequence 5'-CAC[GA]TG-3'. Seems to activate the transcription of growth-related genes.

Involvement in disease

Note=Overexpression of MYC is implicated in the etiology of a variety of hematopoietic tumors. Note=A chromosomal aberration involving MYC may be a cause of a form of B-cell chronic lymphocytic leukemia. Translocation t(8;12)(q24;q22) with BTG1. Defects in MYC are a cause of Burkitt lymphoma (BL) [MIM:113970]. A form of undifferentiated malignant lymphoma commonly manifested as a large osteolytic lesion in the jaw or as an abdominal mass. Note=Chromosomal aberrations involving MYC are usually found in Burkitt lymphoma. Translocations t(8;14), t(8;22) or t(2;8) which juxtapose MYC to one of the heavy or light chain immunoglobulin gene loci.

Sequence similarities

Contains 1 basic helix-loop-helix (bHLH) domain.

Post-translational modifications

Phosphorylated by PRKDC. Phosphorylation at Thr-58 and Ser-62 by GSK3 is required for ubiquitination and degradation by the proteasome. Ubiquitinated by the SCF(FBXW7) complex when phosphorylated at Thr-58 and Ser-62, leading to its degradation by the proteasome. In the nucleoplasm, ubiquitination is counteracted by USP28, which interacts with isoform 1 of FBXW7 (FBW7alpha), leading to its deubiquitination and preventing degradation. In the nucleolus, however, ubiquitination is not counteracted by USP28, due to the lack of interaction between isoform 4 of FBXW7 (FBW7gamma) and USP28, explaining the selective MYC degradation in the nucleolus. Also polyubiquitinated by the DCX(TRUSS) complex.

Cellular localization

Nucleus > nucleoplasm. Nucleus > nucleolus.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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