

Recombinant Rat MYC Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52259

Size: 10ug, 100ug

Protein Name: Myc proto-oncogene protein (Proto-oncogene c-Myc) (Transcription factor p64)

Synonym: Myc

UniProt ID: P09416

UniProt Link: www.uniprot.org/uniprotkb/P09416/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 453 AA

Molecular Weight: 51 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MNFLWEVENPTVTMTPLNVSFANRNYDL DYDSVQPYFICDEEENFYHQQQQSE LQPPAPSEDIWKK
FELLPTPPLSPSRRSGLCSPSYVAVATSFSPREDDDDGGGGNFSTADQLEM MTELLGGDMV NQSFIC
DPDDETFIKNIIQDCMWSGFSAAAKLVSEKLASYQAARKDSTSLSPARGHSVCSTSSLYLQDLTAAA
SECIDPSVVPFYPLNDSSSPKSC TSSDSTAFSSSSDSLSSSESSPRATPEPLVLHEETPPTTSSDSEE
EQDDEEEIDVVSVEKRQPPAKRSESGSSPSRGH SKPPHSPLVLKRCHVSTHQHNYAAPPSTRKDYP
AAKRAKLD SGRVLKQISNNRKCSSPRSSDTEENDKR RTHNVLERQRRNELKRSFFALRDQIPELENN
EKAPKVVILKKATAYILSVQADEHKLISEKDLLRKRREQLKHKLEQLRNSGA

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 Myc proto-oncogene protein (Proto-oncogene c-Myc) (Transcription factor p64) 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: Transcription factor that binds DNA in a non-specific manner, yet also specifically recognizes the core sequence 5'-CAC[GA]TG-3'. Activates the transcription of growth-related genes (PubMed:17304222). Binds to the VEGFA promoter, promoting VEGFA production and subsequent sprouting angiogenesis (By similarity). Regulator of somatic reprogramming, controls self-renewal of embryonic stem cells. Functions with TAF6L to activate target gene expression through RNA polymerase II pause release (By similarity). Positively regulates transcription of HNRNPA1, HNRNPA2 and PTBP1 which in turn regulate splicing of pyruvate kinase PKM by binding repressively to sequences flanking PKM exon 9, inhibiting exon 9 inclusion and resulting in exon 10 inclusion and production of the PKM M2 isoform (By similarity).

Subcellular Localization: Nucleus, nucleoplasm . Nucleus, nucleolus . Nucleus . Cytoplasm . Chromosome . Note=Association with chromatin is reduced by hyperphosphorylation. Localization to the nucleolus is dependent on HEATR1.

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.