Data Sheet (Cat.No.TMPY-02888)

TargetMol

MAX Protein, Human, Recombinant (His & GST)

General Information

Synonyms:	MYC associated factor X;bHLHd4
Protein Construction:	A DNA sequence encoding the human MAX (NP_002373) (Met1-Ser160) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	P61244-1
Molecular Weight:	46.1 kDa (predicted); 73 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris, 500 mM NaCl, pH 8.0, 10% gly. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

MYC associated factor X contains 1 basic helix-loop-helix (bHLH) domain and belongs to the MAX family. It is highly expressed in the brain, heart, and lung while lower levels are seen in the liver, kidney, and skeletal muscle. MYC associated factor X can form homodimers and heterodimers with other family members, which include Mad, Mxi1, and Myc. Myc is an oncoprotein implicated in cell proliferation, differentiation, and apoptosis. The homodimers and heterodimers compete for a common DNA target site (the E box) and rearrangement among

these dimer forms provides a complex system of transcriptional regulation. MYC associated factor X may also repress transcription via the recruitment of a chromatin remodeling complex containing H3 'Lys-9' histone methyltransferase activity. Multiple alternatively spliced transcript variants have been described for MYC associated factor X gene but the full-length nature for some of them is unknown.

Reference

Mac Partlin M,et al.(2003) Interactions of the DNA mismatch repair proteins MLH1 and MSH2 with c-MYC and MAX. Oncogene. 22(6):819-25.

Cheng SW,et al.(1999) c-MYC interacts with INI1/hSNF5 and requires the SWI/SNF complex for transactivation function. Nat enet. 22(1):102-5.

McMahon SB,et al.(1998) The novel ATM-related protein TRRAP is an essential cofactor for the c-Myc and E2F oncoproteins. Cell. 94(3):363-74.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481