Recombinant MAD1 protein (His tag)

Catalog Number	544844
Synonyms	Max dimerizer 1; Protein MAD
Species	Human
Expression System	E. coli
Accession	Q05195
Molecular Weight	Predictes a molecular mass of 14.54 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	56-166
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 56-166 aa (Q05195) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Max Dimerization Protein 1 (MAD) Fragment (aa 56-166) is a high-purity protein designed for studying the bHLH domain's role in transcriptional repression. This fragment enables targeted investigation of MAD's antagonistic function against MYC activity and its DNA-binding properties, making it an essential tool for cancer and gene regulation research. Max Dimerization Protein 1 (MAD) is a transcriptional repressor that forms a complex with MAX, binding to the core DNA sequence 5'-CAC[GA]TG-3'. It functions as a key antagonist of MYC transcriptional activity by competing with MYC for MAX binding. Additionally, MAD binds to the TERT promoter and represses telomerase expression, potentially through interference with MYC binding. The protein is localized to the nucleus, where it executes its regulatory functions in cell proliferation and differentiation pathways.