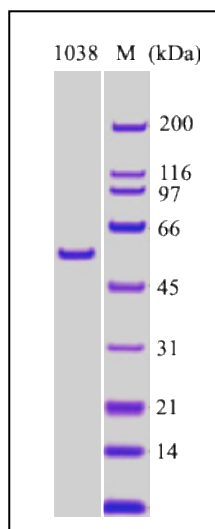


DNA Topo I (197-651) Protein

Catalog Number	Size
AG1038-10	10ug
AG1037-25	25ug
AG1037-B	Bulk

Description



The core domain of human Topoisomerase I (197-651) was expressed in the baculovirus system and purified by an affinity column in combination of other chromatograph methods. The resulted protein is a monomeric polypeptide of 461 (15+446 amino acids with a 6His tag at the N-terminus). It migrates in SDS-PAGE with an apparent molecular mass of 55kDa.

MHHHHHHGRRASVLEKEEEQKWKWEEERYPEGIKWKFLHKGPFVAPPYE
PLPENVKFYFDGKVMKLSPKAAEVATFFAKMLDHEYTTKEIFRKNFFKDWR
KEMTNEEKNIITNLSKCDFTQMSQYFKAQTEARKQMSKEEKLKIKEENEKL
LKEYGFCIMDNHKERIANFKIEPPGLFRGRGNHPKMGMLKRRIMPEDIIN
CSKDAKVPSPPPGHKWKEVRHDNKVTWLVSWTENIQGSIKYIMLNPSRIK
GEKDWQKYETARRLLKKCVDKIRNQYREDWKSKEMKVRQRAVALYFIDKLAL
RAGNEKEEGETADTVGCCSLRVEHINLHPELDGQEYVVEFDFLGKDSIRYY
NKVPVEKRVFKNLQLFMENKQPEDDLFDRLNTGILNKHLDLMEGLTAKVF
RTYNASITLQQQLKELTAPDENIPAKILSYNRANRAVAILCNHQRAPPKTF
EKSMMNLQTKI

Accession Number

NM_003286

Molecular Mass

Approximately 55kDa.

Purity

≥90%, as determined by SDS-PAGE.

Biological Activity

The core domain expanded from amino acids 215 to 636 is highly conserved and retains DNA binding activity. Mutations at residues 533 and 583 are responsible for the resistance to Camptothecin (CPT), an antitumor drug that specifically targets DNA Topo I. The recombinant core domain of Topo I protein can be used for protein-DNA and Protein-protein interactions.

Formulation

20mM Tris-Cl (pH7.9), 20% glycerol 150mM NaCl, 1mM DTT and 3mM EDTA.

Storage

The protein sample can be stored under sterile conditions at 2-8°C for one month or at -20°C to -70°C for three months without detectable loss of activity. **(Avoid repeated freeze-thaw cycle)**

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