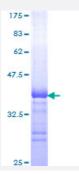


TOP2A (Human) Recombinant Protein (Q01)

Catalog # H00007153-Q01 Size 25 ug, 10 ug

Applications



Specification	
Product Description	Human TOP2A partial ORF (NP_001058, 1435 a.a 1531 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	RAAPKGTKRDPALNSGVSQKPDPAKTKNRRKRKPSTSDDSDSNFEKIVSKAVTSKKSKGESDD FHMDFDSAVAPRAKSVRAKKPIKYLEESDEDDLF
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.41
Interspecies Antigen Sequence	Mouse (68); Rat (71)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCI, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.



Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — TOP2A	
Entrez GenelD	7153
GeneBank Accession#	NM_001067
Protein Accession#	NP_001058
Gene Name	TOP2A
Gene Alias	TOP2, TP2A
Gene Description	topoisomerase (DNA) II alpha 170kDa
Omim ID	126430
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic state s of DNA during transcription. This nuclear enzyme is involved in processes such as chromosome condensation, chromatid separation, and the relief of torsional stress that occurs during DNA tran scription and replication. It catalyzes the transient breaking and rejoining of two strands of duplex DNA which allows the strands to pass through one another, thus altering the topology of DNA. Two forms of this enzyme exist as likely products of a gene duplication event. The gene encoding this form, alpha, is localized to chromsome 17 and the beta gene is localized to chromosome 3. The gene encoding this enzyme functions as the target for several anticancer agents and a variety of mutations in this gene have been associated with the development of drug resistance. Reduced a ctivity of this enzyme may also play a role in ataxia-telangiectasia. [provided by RefSeq
Other Designations	DNA topoisomerase II, 170 kD DNA topoisomerase II, alpha isozyme topoisomerase (DNA) II alpha (170kD)

Disease



- Breast cancer
- Breast Neoplasms
- Genetic Predisposition to Disease
- Leukemia
- Lymphatic Metastasis
- Lymphoma
- Recurrence
- Stomach Neoplasms