

Datasheet for ABIN7555788

## Topoisomerase II alpha Protein (AA 1-1531) (His tag)



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### Overview

|                               |                                                               |
|-------------------------------|---------------------------------------------------------------|
| Quantity:                     | 1 mg                                                          |
| Target:                       | Topoisomerase II alpha (TOP2A)                                |
| Protein Characteristics:      | AA 1-1531                                                     |
| Origin:                       | Human                                                         |
| Source:                       | HEK-293 Cells                                                 |
| Protein Type:                 | Recombinant                                                   |
| Purification tag / Conjugate: | This Topoisomerase II alpha protein is labelled with His tag. |

### Product Details

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Purpose:  | Custom-made recombinant TOP2A Protein expressed in mammalian cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Sequence: | <p>MEVSPLQPVN ENMQVNKIKK NEDAKKRLSV ERIYQKKTQL EHILLRPDTY IGSVELVTQQ</p> <p>MWVYDEDVGI NYREVTVPVPG LYKIFDEILV NAADNKQRDP KMSCIRVTID PENNLISIWN</p> <p>NGKGIPVVEH KVEKMYVPAL IFGQLLTSSN YDDDEKKVTG GRNGYGAKLC NIFSTKFTVE</p> <p>TASREYKKMF KQTWMDNMGR AGEMELKPFN GEDYTCITFQ PDLSKFQM QS LDKDIVALMV</p> <p>RRAYDIAGST KDVKVFLNGN KLPVKGFRSY VDMYLDKLD ETGNSLKVH EQVNHRWEVC</p> <p>LTMSEKGFQQ ISFVNSIATS KGGRHVDYVA DQIVTKLVDV VKKKNKGGVA VKAHQVKNHM</p> <p>WIFVNALIEN PTFDSQTKEN MTLQPKSFGS TCQLSEKFIK AAGCGIVES ILNWVKFKAQ</p> <p>VQLNKKCSAV KHNRIKGIPK LDDANDAGGR NSTECTLILT EGDSAKTLAV SGLGVVGRDK</p> <p>YGVFPLRGKI LNVREASHKQ IMENAEINNI IKIVGLQYKK NYEDEDSLKT LRYGKIMIMT</p> <p>DQDQDGSNIK GLLINFIHHN WPSLLRHRFL EEFITPIVKV SKNKQEMAFY SLPEFEEWKS</p> <p>STPNHKKWKV KYYKGLGTST SKEAKEYFAD MKRHRIQFKY SGPEDDAAIS LAFSKKQIDD</p> <p>RKEWLTNFME DRRQRKLLGL PEDYLYGQTT TYLTYNDFIN KELILFSNSD NERSIPSMVD</p> |

GLKPGQRKVL FTCFKRNDKR EVKVAQLAGS VAEMSSYHHG EMSLMMTIIN LAQNFVGSNN  
LNLLQPIGQF GTRLHGKDS ASPRYIFTML SSLARLLFPP KDDHTLKFLY DDNQRVEPEW  
YIPIPMVLI NGAEGIGTGW SCKIPNFDVR EIVNNIRRLM DGEEPLPMLP SYKNFKGTIE  
ELAPNQYVIS GEVAILNSTT IEISELPVRT WTQTYKEQVL EPMLNGTEKT PPLITDYREY  
HTDTTVKFVV KMTEEKLAEA ERVGLHKVFK LQTS LTCNSM VLFDHVGCLK KYDTVLDILR  
DFFELRLKYY GLRKEWLLGM LGAESAKLNN QARFILEKID GKIIINPKP KELIKVLIQR  
GYSDPVKAW KEAQQKVPDE EENEESDNEK ETEKSDSVTD SGPTFNYLLD MPLWYLTKEK  
KDELCLRNE KEQELDTLKR KSPSDLWKED LATFIEELEA VEAKEKQDEQ VGLPGKGGKA  
KGKKTQMAEV LPSPRGQRFV PRITIEMKAE AEKKNKKKIK NENTEGSPQE DGVELEGLKQ  
RLEKKQKREP GTKTKKQTTL AFKPIKKGKK RNPWSDSESD RSSDESDFDV PPTEPRRA  
ATKTKFTMDL DSEDFSDFD EKTDDDFVP SDASPPKTKT SPKLSNKLK PQKSVSDLE  
ADDVKGSVPL SSSPPATHFP DETEITNPVP KKNVTVKKTA AKSQSSTSTT GAKKRAAPKG  
TKRDPALNSG VSQKPDPAKT KNRRKRKPST SDDSDSNFEK IVSKAVTSKK SKGESDDFHM  
DFDSAVAPRA KSVRAKKPIK YLEESDEDDL F

**Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Specificity:     | If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Characteristics: | <p>Key Benefits:</p> <ul style="list-style-type: none"><li>• Made to order protein - from design to production - by highly experienced protein experts.</li><li>• Protein expressed in mammalian cells and purified in one-step affinity chromatography</li><li>• The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li><li>• State-of-the-art algorithm used for plasmid design (Gene synthesis).</li></ul> <p>This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.</p> <p>If you are not interested in a full length protein, please contact us for individual protein fragments.</p> <p>The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.</p> |
| Purity:          | > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Product Details

Grade: custom-made

## Target Details

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|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Target:           | Topoisomerase II alpha (TOP2A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Alternative Name: | TOP2A ( <a href="#">TOP2A Products</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Background:       | DNA topoisomerase 2-alpha (EC 5.6.2.2) (DNA topoisomerase II, alpha isozyme),FUNCTION: Key decatenating enzyme that alters DNA topology by binding to two double-stranded DNA molecules, generating a double-stranded break in one of the strands, passing the intact strand through the broken strand, and religating the broken strand (PubMed:17567603, PubMed:18790802, PubMed:22013166, PubMed:22323612). May play a role in regulating the period length of BMAL1 transcriptional oscillation (By similarity). {ECO:0000250 UniProtKB:Q01320, ECO:0000269 PubMed:17567603, ECO:0000269 PubMed:18790802, ECO:0000269 PubMed:22013166, ECO:0000269 PubMed:22323612}. |
| Molecular Weight: | 174.4 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| UniProt:          | <a href="#">P11388</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Pathways:         | <a href="#">Cell Division Cycle, Mitotic G1-G1/S Phases</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## Application Details

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|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application Notes: | We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though. |
| Restrictions:      | For Research Use only                                                                                                                                   |

## Handling

|                  |                                                                  |
|------------------|------------------------------------------------------------------|
| Format:          | Liquid                                                           |
| Buffer:          | The buffer composition is at the discretion of the manufacturer. |
| Handling Advice: | Avoid repeated freeze-thaw cycles.                               |
| Storage:         | -80 °C                                                           |
| Storage Comment: | Store at -80°C.                                                  |
| Expiry Date:     | 12 months                                                        |