

Product datasheet for PH305715

RPA34 (RPA2) (NM_002946) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	RPA2 MS Standard C13 and N15-labeled recombinant protein (NP_002937)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC205715
Predicted MW:	29.2 kDa
Protein Sequence:	>RC205715 protein sequence Red=Cloning site Green=Tags(s) MWNSGFESYGSSSYGGAGGYTQSPGGFGSPAPSQAEEKSRARAQHIVPCTISQLLSATLVDEVFRIGNVE ISQVTIVGIIRHAEKAPTNIIVYKIDDMTAAAPMDVRQWVDTDDTSSSENTVVPPEYVYKVAGHLRSFQNKKS LVAFKIMPLEDMNEFTTHILEVINAHMVLKANSQPSAGRAPISNPGMSEAGNFGGNSFMPANGLTVAQN QVLNLIKACPRPEGLNFQDLKNQLKHMVSSIKQAVDFLSNEGHIYSTVDDDDHFKSTDAE SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_002937
RefSeq Size:	1819
RefSeq ORF:	810
Synonyms:	REPA2; RP-A p32; RP-A p34; RPA32
Locus ID:	6118
UniProt ID:	P15927



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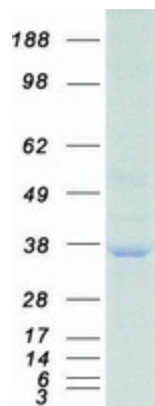
Cytogenetics: 1p35.3

Summary: This gene encodes a subunit of the heterotrimeric Replication Protein A (RPA) complex, which binds to single-stranded DNA (ssDNA), forming a nucleoprotein complex that plays an important role in DNA metabolism, being involved in DNA replication, repair, recombination, telomere maintenance, and co-ordinating the cellular response to DNA damage through activation of the ataxia telangiectasia and Rad3-related protein (ATR) kinase. The RPA complex protects single-stranded DNA from nucleases, prevents formation of secondary structures that would interfere with repair, and co-ordinates the recruitment and departure of different genome maintenance factors. The heterotrimeric complex has two different modes of ssDNA binding, a low-affinity and high-affinity mode, determined by which oligonucleotide/oligosaccharide-binding (OB) domains of the complex are utilized, and differing in the length of DNA bound. This subunit contains a single OB domain that participates in high-affinity DNA binding and also contains a winged helix domain at its carboxy terminus, which interacts with many genome maintenance protein. Post-translational modifications of the RPA complex also plays a role in co-ordinating different damage response pathways. [provided by RefSeq, Sep 2017]

Protein Families: Druggable Genome, Stem cell - Pluripotency

Protein Pathways: DNA replication, Homologous recombination, Mismatch repair, Nucleotide excision repair

Product images:



Coomassie blue staining of purified RPA2 protein (Cat# [TP305715]). The protein was produced from HEK293T cells transfected with RPA2 cDNA clone (Cat# [RC205715]) using MegaTran 2.0 (Cat# [TT210002]).