

# **Product datasheet for PH304442**

## OriGene Technologies, Inc.

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### CDK2AP1 (NM\_004642) Human Mass Spec Standard

**Product data:** 

**Product Type:** Mass Spec Standards

**Description:** CDK2AP1 MS Standard C13 and N15-labeled recombinant protein (NP\_004633)

Species:HumanExpression Host:HEK293

**Expression cDNA Clone** 

RC204442

or AA Sequence: Predicted MW:

12.4 kDa

Protein Sequence: >RC204442 protein sequence

Red=Cloning site Green=Tags(s)

MSYKPNLAAHMPAAALNAAGSVHSPSTSMATSSQYRQLLSDYGPPSLGYTQGTGNSQVPQSKYAELLAII

EELGKEIRPTYAGSKSAMERLKRGIIHARGLVRECLAETERNARS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-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 004633

RefSeq Size: 1655 RefSeq ORF: 345

**Synonyms:** doc-1; DOC1; DORC1; p12DOC-1; ST19

 Locus ID:
 8099

 UniProt ID:
 014519

 Cytogenetics:
 12q24.31

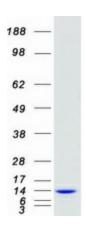




#### Summary:

The protein encoded by this gene is a cyclin-dependent kinase 2 (CDK2) -associated protein which is thought to negatively regulate CDK2 activity by sequestering monomeric CDK2, and targeting CDK2 for proteolysis. This protein was found to also interact with DNA polymerase alpha/primase and mediate the phosphorylation of the large p180 subunit, which suggests a regulatory role in DNA replication during the S-phase of the cell cycle. This protein also forms a core subunit of the nucleosome remodeling and histone deacetylation (NURD) complex that epigenetically regulates embryonic stem cell differentiation. This gene thus plays a role in both cell-cycle and epigenetic regulation. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2012]

### **Product images:**



Coomassie blue staining of purified CDK2AP1 protein (Cat# [TP304442]). The protein was produced from HEK293T cells transfected with CDK2AP1 cDNA clone (Cat# [RC204442]) using MegaTran 2.0 (Cat# [TT210002]).