

## Product datasheet for PH310316

### Cyclin D2 (CCND2) (NM\_001759) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	CCND2 MS Standard C13 and N15-labeled recombinant protein (NP_001750)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC210316
Predicted MW:	33.1 kDa
Protein Sequence:	>RC210316 protein sequence Red=Cloning site Green=Tags(s)  MELLCHEVDPVRRRAVRDRNLLRDDRVLQNLITIEERYLPQCSYFKCVQKDIQPYMRRMVATWMLEVCEEQ KCEEEVFPLAMNYLDRFLAGVPTPKSHLQLLGAVCMFLASKLKETSPLTAEKLCIYTDNSIKPQELLEWE LVVLGKLGKWNLAAVTPHDFIEHILRKLPPQREKLSLIRKHAQTFIALCATDFKFMYPSPMIATGSGVAA ICGLQQDEEVSSLTCDALTELLAKITNTDQVCLKACQEQIEAVLLNSLQQYRQDQRDQSGKSEDELQAST PTDVRDIDL  TRTRPLEQKLI 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- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-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:	<u>NP_001750</u>
RefSeq Size:	6531
RefSeq ORF:	867
Synonyms:	KIAK0002; MPPH3
Locus ID:	894



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UniProt ID: [P30279](#)

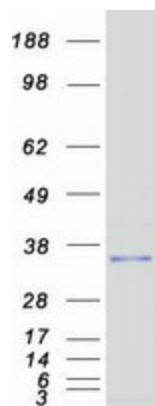
Cytogenetics: 12p13.32

**Summary:** The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin forms a complex with CDK4 or CDK6 and functions as a regulatory subunit of the complex, whose activity is required for cell cycle G1/S transition. This protein has been shown to interact with and be involved in the phosphorylation of tumor suppressor protein Rb. Knockout studies of the homologous gene in mouse suggest the essential roles of this gene in ovarian granulosa and germ cell proliferation. High level expression of this gene was observed in ovarian and testicular tumors. Mutations in this gene are associated with megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome 3 (MPPH3). [provided by RefSeq, Sep 2014]

**Protein Families:** Druggable Genome

**Protein Pathways:** Cell cycle, Focal adhesion, Jak-STAT signaling pathway, p53 signaling pathway, Wnt signaling pathway

### Product images:



Coomassie blue staining of purified CCND2 protein (Cat# [TP310316]). The protein was produced from HEK293T cells transfected with CCND2 cDNA clone (Cat# [RC210316]) using MegaTran 2.0 (Cat# [TT210002]).