

## CDK2AP2 Protein, Human (HEK293, His)

Cat. No.:	HY-P7850
Synonyms:	rHuCyclin-dependent kinase 2-associated protein 2/CDK2AP2, His; Cyclin-dependent kinase 2-associated protein 2; CDK2-associated protein 2; DOC-1-related protein; DOC-1R; CDK2AP2; DOC1R
Species:	Human
Source:	HEK293
Accession:	O75956 (M1-T126)
Gene ID:	10263
Molecular Weight:	Approximately 26.0 kDa

### PROPERTIES

AA Sequence	<div> <div>MSYKPIAPAP</div> <div>GAPFRPLFND</div> <div>IEEMGKEIRP</div> <div>ERNART</div> </div> <div> <div>SSTPGSSTPG</div> <div>FGPPSMGYVQ</div> <div>TYAGSKSAME</div> </div> <div> <div>PGTPVPTGSV</div> <div>AMKPPGAQGS</div> <div>RLKRGIIHAR</div> </div> <div> <div>PSPSGSVPGA</div> <div>QSTYTDLLSV</div> <div>ALVRECLAET</div> </div>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

Background	<p>CDK2AP2 protein functions as a key component of the histone deacetylase NuRD complex, actively participating in chromatin remodeling. Its regulatory role extends to inhibiting the G1/S phase transition in the cell cycle by suppressing CDK2 expression and activation, achieved through interference with the interaction between CDK2 and cyclin E or A. Beyond cell cycle control, CDK2AP2 plays a crucial role in the self-renewal of embryonic stem cells (ESCs) and ensures cell survival during the terminal differentiation of ESCs. Additionally, it contributes to the regulation of microtubule organization in metaphase II oocytes. As part of the NuRD repressor complex, CDK2AP2 collaborates with various core and peripherally associated proteins, including MTA1, MTA2, MTA3, RBBP4, RBBP7, HDAC1, HDAC2, MBD2, MBD3, CDK2AP1, GATAD2A, GATAD2B, CHD3, CHD4, and CHD5. Interactions with CDK2AP1, CDK2, and MAPK1 further underline its multifaceted</p>
------------	---

---

regulatory functions.

---

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA