

Product Name	Recombinant CDK2/Cyclin E1, Active	SDS-PAGE Gel kDa 1 2 170 130 93 70 53 41 30 22 Cyclin E1 CDK2 1 – MW Marker 2 – CDK2/Cyclin E1														
Synonym(s)	Cyclin-dependent kinase 2, p33/CCN31, CCNE															
Quantity	10 µg															
Species	Human															
Tag	N-terminal GST on both															
Molecular weight	60.7 kDa (CDK2); 73 kDa (Cyclin E1)															
Purity	>90% by SDS-PAGE															
GenBank Accession	NM_001798.5 (CDK2) NM_001238.4 (Cyclin E1)															
Expression Source	Sf9 insect cells															
Application	Inhibitor screening, kinase assays															
Formulation	50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.															
Storage and Stability	Stable for 12 months at -80°C, Avoid freeze/thaw cycles															
Description	CDK2 is a member of the Cyclin-Dependent Kinase family that is ubiquitously expressed. CDK2 is a catalytic subunit of the cyclin-dependent protein kinase complex, whose activity is restricted to the G1/S phase, and essential for cell cycle G1/S phase transition. CDK2 associates with and is regulated by the regulatory subunits of the complex including Cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A), and p27Kip1 (CDKN1B). CDK2 phosphorylates multiple cellular substrates including SMAD3 and FOXO1. Phosphorylation of FOXO1 leads to its inhibition. Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.															
Activity	A member of the CMGC class of serine/threonine protein kinases, acting in cell cycle progression. Cyclin E1 stimulates CDK2 kinase activity upon complex formation.	<table><caption>CDK2/Cyclin E1 Activity</caption><thead><tr><th>CDK2/Cyclin E1 (ng)</th><th>Luminescence Intensity (RFU)</th></tr></thead><tbody><tr><td>0</td><td>0</td></tr><tr><td>2</td><td>5000</td></tr><tr><td>5</td><td>15000</td></tr><tr><td>10</td><td>22000</td></tr><tr><td>20</td><td>28000</td></tr><tr><td>40</td><td>32000</td></tr></tbody></table>	CDK2/Cyclin E1 (ng)	Luminescence Intensity (RFU)	0	0	2	5000	5	15000	10	22000	20	28000	40	32000
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Reference	Ohtsubo, M., et al., Mol Cell Biol. 1995;15(5):2612-2624 Harbour, J.W., et al., Cell. 1999;98(6):859-869															

Related products:

<u>Product Name</u>	<u>Catalog #</u>	<u>Size</u>
GST-CDK2:His-CyclinA2	C352A2	10 µg
Recombinant Human CDK2	52352-FL	50 µg, 500 µg
TEV Protease	190001	1,000 Units, 10,000 Units
TEV Protease-His tag	190001-R	50 ug, 200 ug, 1 mg
TEV Protease-GST tag	190004-R	50 ug, 200 ug, 1 mg
TEV Protease-Ai	190005-R	50 ug, 200 ug, 1 mg
PreScission Protease (HRV 3C)	190002	1,000 units, 10,000 units
Recombinant SUMO Protease (Ulp1)	190003	1,000 units, 10,000 units
Recombinant YopH	200100	10 ug, 20 ug, 100 ug, 1 mg
Recombinant Biotin Protein Ligase (BirA)	90101	100 ug
Recombinant SortaseA-5M	90201	50 ug
Recombinant Mouse Leukemia Inhibitory Factor	11-0001	10 ug, 100 ug
Recombinant Human LIF	12-0002	10 ug, 100 ug, 1 mg
Recombinant Human FGF-basic, Carrier-free	12-0005CFR	50 ug, 100 ug, 500 ug, 1 mg
DNA Polymerase Theta-N-Helicase Domain	7657643	20 ug, 100 ug
DNA Polymerase Theta-C terminal Domain	7657283	20 ug, 100 ug, 1 mg
DNA Polymerase Theta Full Length protein	7657385	10 ug, 50 ug
Kras Wild Type (WT), GST-tag	5727-4121G	50 µg, 100 µg
Kras WT, GST-tag, GDP Loaded	5727-WTG-G	50 µg, 100 µg
Kras WT, GST-tag, GppNHp loaded	5727-WTG-GP	50 µg, 100 µg
Kras G12C, GST-tag	5727-4122G	50 µg, 100 µg
Kras G12C, GST-tag, GDP Loaded	5727-4122G -G	50 µg, 100 µg
Kras G12C, GST-tag, GppNHp loaded	5727-4122G -GP	50 µg, 100 µg
Kras G12D, GST-tag	5727-4123G	50 µg, 100 µg
Kras G12D, GST-tag, GDP Loaded	5727-4123G -G	50 µg, 100 µg
Kras G12D, GST-tag, GppNHp loaded	5727-4123G -GP	50 µg, 100 µg
Kras G12V, GST-tag	5727-4128G	50 µg, 100 µg
Kras G12V, GST-tag, GDP Loaded	5727-4128G -G	50 µg, 100 µg
Kras G12V, GST-tag, GppNHp loaded	5727-4128G -GP	50 µg, 100 µg
Human SOS1, No Tag	7671	50 µg, 100 µg
Human RBD-RAF1, N-His tag, C-FLAG tag	7237231	50 µg, 100 µg
Recombinant Human PD-1	23731	100 ug
Recombinant Human PD-L1	237351	100 ug
Recombinant Human OX40	236940	100 ug
Recombinant Human OX40L	2369405	100 ug

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