#### **Product Datasheet**

# Cyclin D2 (Phospho-Thr280) Antibody

Catalog No: #12122

Package Size: #12122-1 50ul #12122-2 100ul



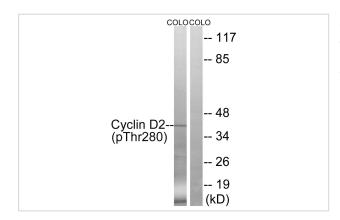
Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Product Name	Cyclin D2 (Phospho-Thr280) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates.
	Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho
	specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of Cyclin D2 only when phosphorylated at threonine 280.
Immunogen Type	peptide
Immunogen Description	Peptide sequence around phosphorylation site of threonine 280 (A-S-T(p)-P-T) derived from Human Cyclin
	D2.
Target Name	Cyclin D2
Modification	Phospho
Other Names	cyclin D2; G1/S-specific cyclin D2
Accession No.	Swiss-Prot#:P30279;NCBI Gene#:894
Uniprot	P30279
GeneID	894;
SDS-PAGE MW	40kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide
	and 50% glycerol.

### **Application Details**

Western blotting: 1:500~1:3000

## **Images**



Western blot analysis of extracts from COLO cells, treated with EGF (200ng/ml, 30mins), using Cyclin D2 (Phospho-Thr280) antibody #12122. The lane on the right is treated with the synthesized peptide.

### Background

Regulatory component of the cyclin D2-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G1/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G1 phase. Hypophosphorylates RB1 in early G1 phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals. Also substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity. Component of the ternary complex, cyclin D2/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex By similarity.

Note: This product is for in vitro research use only