

# Immunotag™ Phospho-Retinoblastoma (Ser780) Antibody

Antibody Specification	
Catalog No.	ITA0875
Product Description	Immunotag™ Phospho-Retinoblastoma (Ser780) Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Phospho-Retinoblastoma (Ser780)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC,IF/ICC,ELISA
Recommended Dilution	WB 1:500-1:2000 IHC 1:50-1:200, IF/ICC 1:100-1:500
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human Retinoblastoma around the phosphorylation site of Serine 780
Specificity	Phospho-Retinoblastoma (Ser780) Antibody detects endogenous levels of Retinoblastoma only when phosphorylated at Serine 780
Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	RB1
Accession No.	P06400

## Antibody Specification

Alternate Names	Exon 17 tumor GOS561 substitution mutation causes premature stop; GOS563 exon 17 substitution mutation causes premature stop; OSRC; Osteosarcoma; p105-Rb; P105RB; PP105; pp110; PPP1R130; pRb; Prepro retinoblastoma associated protein; Protein phosphatase 1 regulatory subunit 130; Rb; RB transcriptional corepressor 1; RB_HUMAN; RB1; RB1 gene; Retinoblastoma 1; Retinoblastoma susceptibility protein; Retinoblastoma-associated protein;
Description	Key regulator of entry into cell division that acts as a tumor suppressor. Promotes G0-G1 transition when phosphorylated by CDK3/cyclin-C. Acts as a transcription repressor of E2F1 target genes. The underphosphorylated, active form of RB1 interacts with E2F1 and represses its transcription activity, leading to cell cycle arrest. Directly involved in heterochromatin formation by maintaining overall chromatin structure and, in particular, that of constitutive heterochromatin by stabilizing histone methylation. Recruits and targets histone methyltransferases SUV39H1, KMT5B and KMT5C, leading to epigenetic transcriptional repression. Controls histone H4 'Lys-20' trimethylation. Inhibits the intrinsic kinase activity of TAF1. Mediates transcriptional repression by SMARCA4/BRG1 by recruiting a histone deacetylase (HDAC) complex to the c-FOS promoter. In resting neurons, transcription of the c-FOS promoter is inhibited by BRG1-dependent recruitment of a phospho-RB1-HDAC1 repressor complex. Upon calcium influx, RB1 is dephosphorylated by calcineurin, which leads to release of the repressor complex (By similarity). In case of viral infections, interactions with SV40 large T antigen, HPV E7 protein or adenovirus E1A protein induce the disassembly of RB1-E2F1 complex thereby disrupting RB1's activity.
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	106kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.