



Rabbit Anti-Human NBN monoclonal antibody, clone TZ1326 (CABT-L634)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	Phospho-p95/NBS1 (S343)
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Clone	TZ1326
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC/IF, IHC, IP
Molecular Weight	95 kDa
Cellular Localization	Nucleus, Chromosome.
Positive Control	PC-3M, mouse testis tissue.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.
Preservative	0.05% Sodium Azide

Storage	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
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BACKGROUND

Introduction	Nijmegen breakage syndrome (NBS) is characterized by extreme radiation sensitivity, chromosomal instability and cancer. These phenotypes are similar to those of ataxia telangiectasia mutated (ATM) disease, where there is a deficiency in a protein kinase that is activated by DNA damage, indicating that the NBS1 (Nibrin) and ATM proteins may participate in common pathways. Nibrin is specifically phosphorylated in response to gamma-radiation, ultraviolet light and exposure to hydroxyurea. The phosphorylation of Nibrin requires catalytically active ATM. ATM physically interacts with and phosphorylates Nibrin on Serine 343 both in vitro and in vivo. Serine 343 is phosphorylated in vitro by ATM and the modification of this residue in vivo is essential for the cellular response to DNA damage. This response includes S-phase checkpoint activation, formation of the NBS1/Mre11/Rad50 nuclear foci and rescue of hypersensitivity to ionizing radiation.
Keywords	AT V1;AT V2;ATV;Cell cycle regulatory protein p95;FLJ10155;MGC87362;Nbn;NBN_HUMAN;NBS 1;NBS;NBS1;Nibrin;Nijmegen breakage syndrome 1 (nibrin);Nijmegen breakage syndrome;Nijmegen breakage syndrome protein 1;p95;p95 protein of the MRE11/RAD50 complex antibody

GENE INFORMATION

Entrez Gene ID	4683
UniProt ID	Q60934
