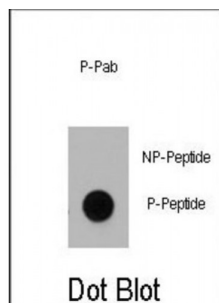


Abbexa Ltd, Innovation Centre, Cambridge Science Park, Cambridge, CB4 0EY, UK
Telephone: +44 (0) 1223 755950 - Fax: +44 (0) 1223 755951 - E-Mail: info@abbexa.com

Dnmt1 (pS714) Antibody

Catalogue No.: abx032017



Methylation of DNA at cytosine residues plays an important role in regulation of gene expression, genomic imprinting and is essential for mammalian development. Hypermethylation of CpG islands in tumor suppressor genes or hypomethylation of bulk genomic DNA may be linked with development of cancer. To date, 3 families of mammalian DNA methyltransferase genes have been identified which include Dnmt1, Dnmt2 and Dnmt3. Dnmt1 is constitutively expressed in proliferating cells and inactivation of this gene causes global demethylation of genomic DNA and embryonic lethality. Dnmt2 is expressed at low levels in adult tissues and its inactivation does not affect DNA methylation or maintenance of methylation. The Dnmt3 family members, Dnmt3a and Dnmt3b, are strongly expressed in ES cells but their expression is down regulated in differentiating ES cells and is low in adult somatic tissue. Dnmt1 co-purifies with the retinoblastoma (Rb) tumour suppressor gene product, E2F1, and HDAC1. Dnmt1 also cooperates with Rb to repress transcription from promoters containing E2F binding sites suggesting a link between DNA methylation, histone deacetylase and sequence-specific DNA binding activity, as well as a growth-regulatory pathway that is disrupted in nearly all cancer cells.

Target: Dnmt1 (pS714)

Reactivity: Human

Host: Rabbit

Clonality: Polyclonal

Tested Applications: DB

Recommended dilutions: Optimal dilutions/concentrations should be determined by the end user.

Immunogen: Human Dnmt1 (phospho-Ser714).

Purification: Peptide Affinity Purified Rabbit Polyclonal Antibody.

Isotype: IgG

Conjugation: Unconjugated

Abbexa Ltd, Innovation Centre, Cambridge Science Park, Cambridge, CB4 0EY, UK
Telephone: +44 (0) 1223 755950 - Fax: +44 (0) 1223 755951 - E-Mail: info@abbexa.com

Specificity:	This Dnmt1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S714 of human Dnmt1.
Storage:	Aliquot and store at -20 °C. Avoid repeated freeze/thaw cycles.
Swiss Prot:	<u>P26358</u>
Buffer:	PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by two-step phosphospecific peptide affinity purification.
Note:	This product is for research use only.