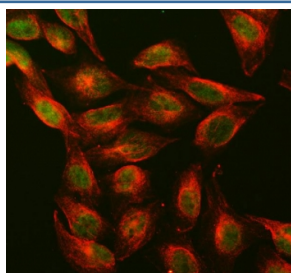


## Dnmt1 Antibody / DNA methyltransferase 1 (RQ4002)

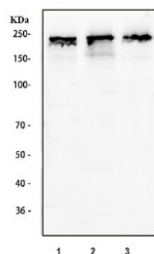
Catalog No.	Formulation	Size
RQ4002	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

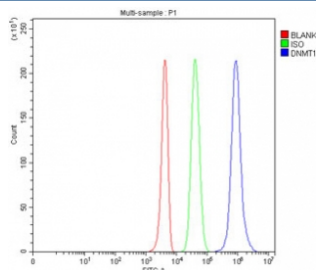
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	P26358
<b>Localization</b>	Nuclear
<b>Applications</b>	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
<b>Limitations</b>	This Dnmt1 antibody is available for research use only.



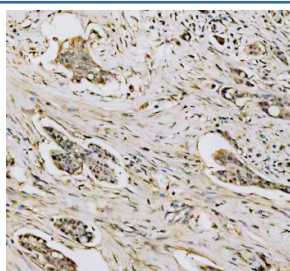
Immunofluorescent staining of FFPE human U-2 OS cells with Dnmt1 antibody (green) and Alpha Tubulin mAb (red). HIER: steam section in pH6 citrate buffer for 20 min.



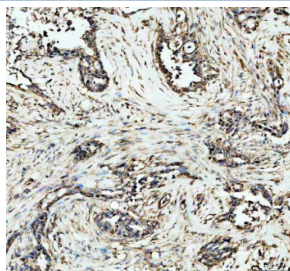
Western blot testing of human 1) HeLa, 2) 293T and 3) SH-SY5Y cell lysate with Dnmt1 antibody. Predicted molecular weight 180-200 kDa.



Flow cytometry testing of fixed and permeabilized human 293T cells with Dnmt1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Dnmt1 antibody.



IHC staining of FFPE human breast cancer tissue with Dnmt1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human pancreatic cancer tissue with Dnmt1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

## Description

Dnmt1 (DNA methyltransferase 1) is a key enzyme responsible for maintaining DNA methylation patterns during DNA replication. It ensures the faithful inheritance of epigenetic information by copying methylation marks onto the daughter strand. This process is essential for regulating gene expression, chromatin stability, and genomic imprinting.

Dnmt1 has been implicated in cell cycle regulation, development, and disease states where abnormal methylation occurs, such as cancer. Because of its central role in epigenetic control, it is widely studied in both developmental biology and disease research.

A Dnmt1 antibody is a valuable tool for detecting and monitoring this enzyme in various assays, including western blot, immunohistochemistry, and immunofluorescence. Researchers often use a Dnmt1 antibody to study epigenetic regulation mechanisms. NSJ Bioreagents offers a high-quality Dnmt1 antibody to support epigenetics and cancer research.

## Application Notes

Optimal dilution of the Dnmt1 antibody should be determined by the researcher.

## Immunogen

A recombinant human partial protein corresponding to amino acids D22-N126 was used as the immunogen for the Dnmt1

antibody.

## Storage

After reconstitution, the Dnmt1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.