



Anti-DNA cytosine methyltransferase 3 alpha isoform a (DNMT3a), Chicken-Polyclonal Antibody

Catalog No. PY-10157 **Quantity:** 1mg **Applications tested:** Western blot, IHC
Antigen species: Human **Reactivity:** Human, Mouse, Rat
Host species: Chicken **Form:** Total IgY antibody

Target description

This protein is required for genome wide de novo methylation and is essential for development. The protein localizes primarily to the nucleus and its expression is developmentally regulated. Mutations in the gene cause the immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome. This variant (1) represents the longest transcript and encodes the longest isoform.

Antigen

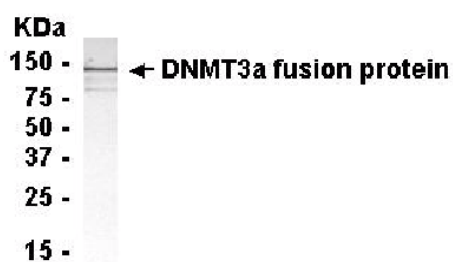
This polyclonal antibody was raised by immunizing chicken with DNMT3a fusion protein (1-300 amino acids).

Application

Western blotting, tissue or cell immunostaining. Recommended starting dilution for Western blot analysis is 1:500, for tissue or cell staining is 1:200. Optimal working dilutions must be determined by the end user.

Related Products

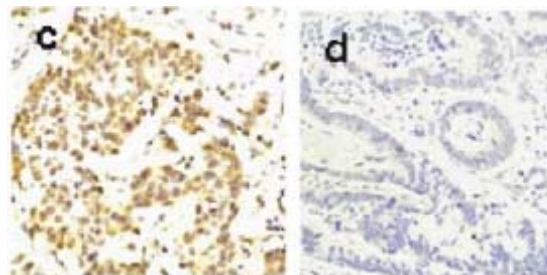
1. Anti-DNA cytosine methyltransferase 1 (DNMT1), Chicken pAb (PY-10156).
2. Anti-DNA (cytosine-5-)-methyltransferase 3 beta (DNMT3b), Chicken pAb (PY-10202).



E coli-derived fusion protein as test antigen

Western blot Protocol

1. Block membrane with 5% non-fat milk in PBS-T for 1 hour at room temperature or longer at 4°C.
2. Incubate membrane with IgY antibodies at dilution of 1: 2,000 with 1% milk in PBS-T at R.T. for 1 h.
3. Rinse 3 times with PBS-T, then wash membrane with PBS-T, 5 min each, total of 3 times.
4. Incubate with 2nd antibody (goat-anti-IgY/Fc-HRP) at dilution 1:1,000 for ECL (with 1% milk PBS-T) at R.T. for 1h.
5. Rinse 3 times with PBS-T, then wash with PBS-T, 5 min each with shaking, total of 3 times.
6. Perform ECL detection of signal using Pierce ECL kit.



Immunohistochemistry Staining:

Overexpression of DNMT3a proteins in surgically resected NSCLC tumors.

c. nuclear positive; d. negative

Storage

It is supplied as total IgY in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 10mg/ml (1xPBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

References

Weisenberger, D.J., Velicescu, M., Preciado-Lopez, M.A., Gonzales, F.A., Tsai, Y.C., Liang, G. and Jones, P.A. Identification and characterization of alternatively spliced variants of DNA methyltransferase 3a in mammalian cells. *Gene* 298 (1), 91-99 (2002).

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