

## Data Sheet

### DNMT3A/DNMT3L

Human, recombinant, His- and GST-tagged  
**Catalog #:** 51106  
**Lot#:** 100824      **Conc.:** 1.8 mg/ml

**Formulated in:** 40 mM Tris-HCl, pH 8.0,  
 110 mM NaCl, 2.2 mM KCl, 3 mM DTT, 16  
 mM Glutathione and 20% glycerol.

**Stability:** >6 months at -80°C

**References:**

1. Jia, D., *et al.*, *Nature* **449**: 248-251 (2007).
2. Suetake, I. *et al.*, *J. Biol. Chem.* **279(26)**: 27816-27823 (2004).
3. Gowher, H., *et al.*, *J. Biol. Chem.* **280**: 13341-13348 (2005).

**Description:**

Complex of human DNA methyl-transferase 3A (DNMT3A), GenBank Accession No. NM\_175629, a.a 623-912(end) with N-terminal His-tag, MW=34 kDa, and DNMT3L (GenBank Accession No. NM\_013369), a.a. 160-387(end), with an N-terminal GST tag, MW = 52 kDa, co-expressed in a baculovirus-infected Sf9 cell expression system.

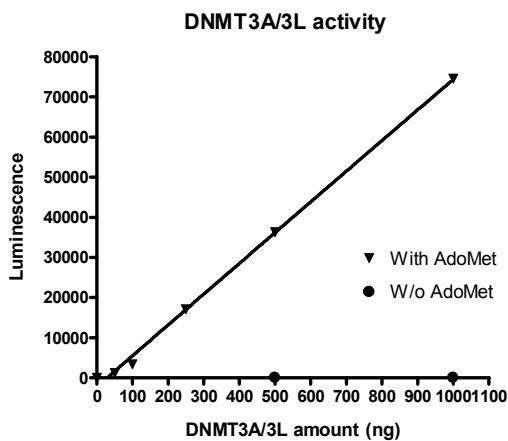
**Specific Activity:** 0.58 pmol/min/μg.

Assay conditions: 50 μl reaction mix containing DNMT3A/DNMT3L added to wells coated with the DNMT substrate. Incubate 2 hr at 37°C. Add antibody against 5-methylcytosine, then HRP-labeled secondary antibody followed by chemiluminescent detection.

**Application:**

Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

### Quality Assurance



**10 % SDS-PAGE  
 Coomassie staining**

**Lane 1:**  
 3 μg DNMT3A/DNMT3L  
**Lane 2:**  
 Protein Marker  
 BioLabs (#P7708L)

**MW:** 34 kDa (DNMT3A)  
 and 52 kDa (DNMT3L)  
**Purity:** >95%

