

# Product Information



## MLL1 (human recombinant) Assay Enzyme

Item No. 600582

### IMPORTANT

Water used to prepare all reagents and buffers must be deionized and free of trace organic contaminants ('UltraPure'). Use activated carbon filter cartridges or other organic scavengers. Glass distilled water (even if double distilled), HPLC-grade water, and sterile water (for injections) are not adequate for FP. UltraPure water may also be purchased (Item No. 400000).

### Laboratory Procedures

This vial contains 550 µl of MLL1 (human recombinant) Assay Enzyme. For long term storage, we suggest that the enzyme be stored as supplied at -80°C; it will be stable for at least one year. Prior to use in the MLL1 SAM-Screener™ Assay Kit (Item No. 600580), thaw on ice and briefly centrifuge the tube before opening. Dilute 500 µl of MLL1 to a final volume of 4 ml in 1X SAM-Binding Site Assay Buffer. Mix gently (do not vortex) and keep on ice. Long-term storage of the diluted enzyme is not recommended.

### Assay Buffer

Buffer for diluting the enzyme can be purchased from Cayman Chemical as a 10X stock solution (Item No. 600491).

### Suggested Assay Protocol

This product has been tested and formulated to work exclusively with the MLL1 SAM-Screener™ Assay Kit (Item No. 600580). This product may not perform as described if used with other assay reagents or protocols. Follow the steps below to accurately measure mP in the assay. Allow all reagents except for the MLL1 enzyme to equilibrate to room temperature prior to performing the assay. Keep the MLL1 enzyme on ice until just prior to use. Volumes indicated below are for a 384-well plate format with a 20 µl final assay volume.

#### 1. Inhibitor Samples

Dilute inhibitor samples in 1X SAM-Binding Site Assay Buffer to a concentration that is 4X the desired final concentration (*e.g.*, if 1 µM is desired, prepare a 4 µM solution). This solution may contain up to 8% of an organic solvent (*e.g.*, DMSO). Add 5 µl of this dilution to the desired wells.

#### 2. Positive and negative control samples

For positive (inhibitor control) control wells, add 5 µl of the reconstituted SAM-Binding Site Positive Control (Item No. 600494) to the desired wells.

For negative (no inhibition) control wells, add 5 µl of 1X SAM-Binding Site Assay Buffer to the desired wells. If inhibitor samples from step 1 contain organic solvent, add an equivalent amount of the solvent into the assay in this step.

#### 3. MLL1 Assay Enzyme

Add 10 µl of the diluted MLL1 Assay Enzyme to every well of the 384-well plate.

#### 4. Pre-incubation (optional)

If desired, incubate the control and sample wells for 15 minutes at room temperature to allow pre-equilibration of the inhibitor and control compounds with the MLL1 enzyme.

#### 5. SAM-Binding Site Probe

Add 5 µl of the reconstituted SAM-Binding Site Probe (Item No. 600493) to every well.

#### 6. Incubation

Seal the plate and incubate at room temperature for 30 minutes. For automation purposes, the plate does not have to be sealed, but it must remain in the dark to prevent photobleaching.

#### 7. Reading the Plate

Read the plate(s) with excitation and emission wavelengths of 575 nm and 620 nm, respectively. The plate reader used at Cayman Chemical also employs a dichroic filter at 595 nm. Some instruments may not utilize this type of filter.

### Related Product

For a list of related products please visit: [www.caymanchem.com/catalog/600582](http://www.caymanchem.com/catalog/600582)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

Copyright Cayman Chemical Company, 01/21/2013

### Cayman Chemical

#### Mailing address

1180 E. Ellsworth Road  
Ann Arbor, MI  
48108 USA

#### Phone

(800) 364-9897  
(734) 971-3335

#### Fax

(734) 971-3640

#### E-Mail

[custserv@caymanchem.com](mailto:custserv@caymanchem.com)

#### Web

[www.caymanchem.com](http://www.caymanchem.com)