

## Recombinant ASH1L (2407-2579) protein

---

**Catalog No:** 31445, 31845

**Lot No:** 11818003

**Expressed In:** *E. coli*

**Quantity:** 100, 1000 µg

**Concentration:** 1.2 µg/µl

**Source:** Human

**Buffer Contents:** Recombinant ASH1L (2407-2579) protein was expressed in *E. coli* cells and is supplied in 25 mM Tris-HCl pH 8.0, 300 mM NaCl, and 10% glycerol.

**Background:** ASH1L is a member of the Trithorax group of transcriptional activators. The protein contains four AT hooks, a SET domain, a PHD-finger motif, and a bromodomain. The bromodomain functions as a 'reader' of epigenetic histone marks and regulates chromatin structure and gene expression by linking associated proteins to the recognized acetylated nucleosomal targets. ASH1L is localized to the nucleus and also to cell-cell tight junctions where it is hypothesized to function in adhesion-mediated signaling. ASH1L functions in methylation of H3K4 and regulation of expression of HOX genes and may possess methyltransferase activity directed at H3K36. ASH1L has also been implicated in facioscapulohumeral muscular dystrophy.

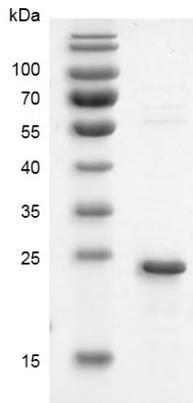
**Protein Details:** The peptide corresponding to amino acids 2407-2579 that contains the bromodomain sequences of ASH1L (accession number NP\_060959.2) was expressed in *E. coli* and contains an N-terminal His-Tag and C-terminal FLAG-Tag with an observed molecular weight of 23.2 kDa.

**Application Notes:** Recombinant ASH1L (2407-2579) is suitable for use in binding assays, inhibitor screening, and selectivity profiling.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

### ASH1L (2407-2579)



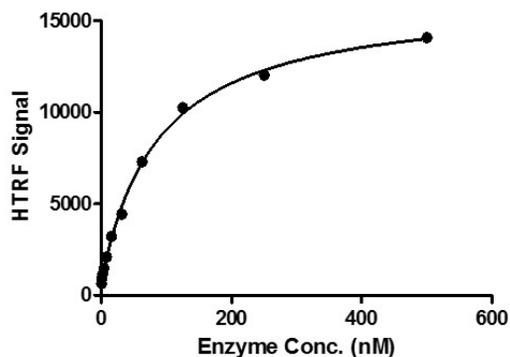
### Recombinant ASH1L (2407-2579) protein gel.

ASH1L (2407-2579) protein was run on a 12% SDS-PAGE gel and stained with Coomassie Blue.

MW: 23.2 kDa

Purity: > 85%

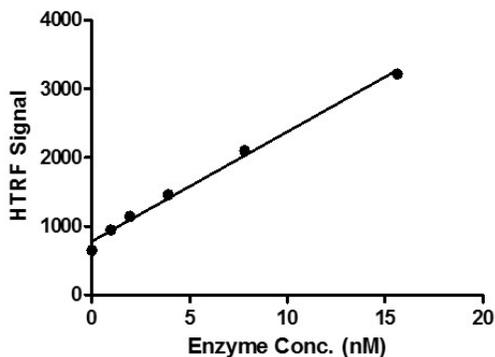
### ASH1L (2407-2579) Titration



### HTRF assay for ASH1L (2407-2579) activity

3  $\mu$ M histone H4K5/8/12/16(ac4) peptide was incubated with different concentrations of ASH1L (2407-2579) protein in a 10  $\mu$ l reaction system containing 50 mM HEPES-NaOH pH 7.4, 0.1% BSA for 1 hour, then 10  $\mu$ l FLAG antibody and SA-XL665 mixture (each 1:100 dilution in the reaction buffer) was added to each reaction system and incubated for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.

### ASH1L (2407-2579) Titration



### HTRF assay for ASH1L (2407-2579) activity

3  $\mu$ M histone H4K5/8/12/16(ac4) peptide was incubated with different concentrations of ASH1L (2407-2579) protein in a 10  $\mu$ l reaction system containing 50 mM HEPES-NaOH pH 7.4, 0.1% BSA for 1 hour, then 10  $\mu$ l FLAG antibody and SA-XL665 mixture (each 1:100 dilution in the reaction buffer) was added to each reaction system and incubated for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.