

PRMT5/MEP50 SPR Assay Service

Methyltransferase PRMT5 assay in complex with MEP50 with [surface plasmon resonance \(SPR\)](#) technique

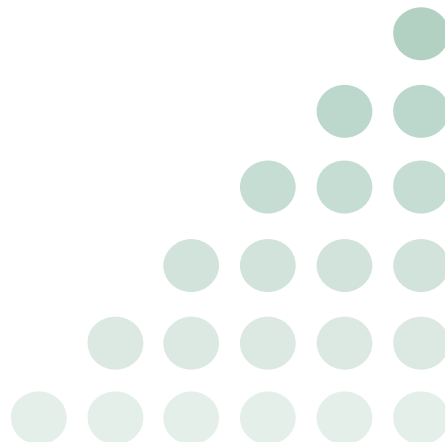
Target Overview

Target	PRMT5 in complex with MEP50 in the absence and presence of co-factors
Synonyms	PRMT5: Protein arginine N-methyltransferase 5 MEP50: Methylosome protein 50, WDR77
Scientific information	PRMT5: Q14744 (https://www.uniprot.org/uniprot/Q14744) MEP50: Q9BQA1 (https://www.uniprot.org/uniprot/Q9BQA1)
Protein source	Reaction Biology Cat# HMT-22-148
Screening location	Malvern, PA, USA
Further information	More information can be found on our website SPR Assay Services for Drug Discovery

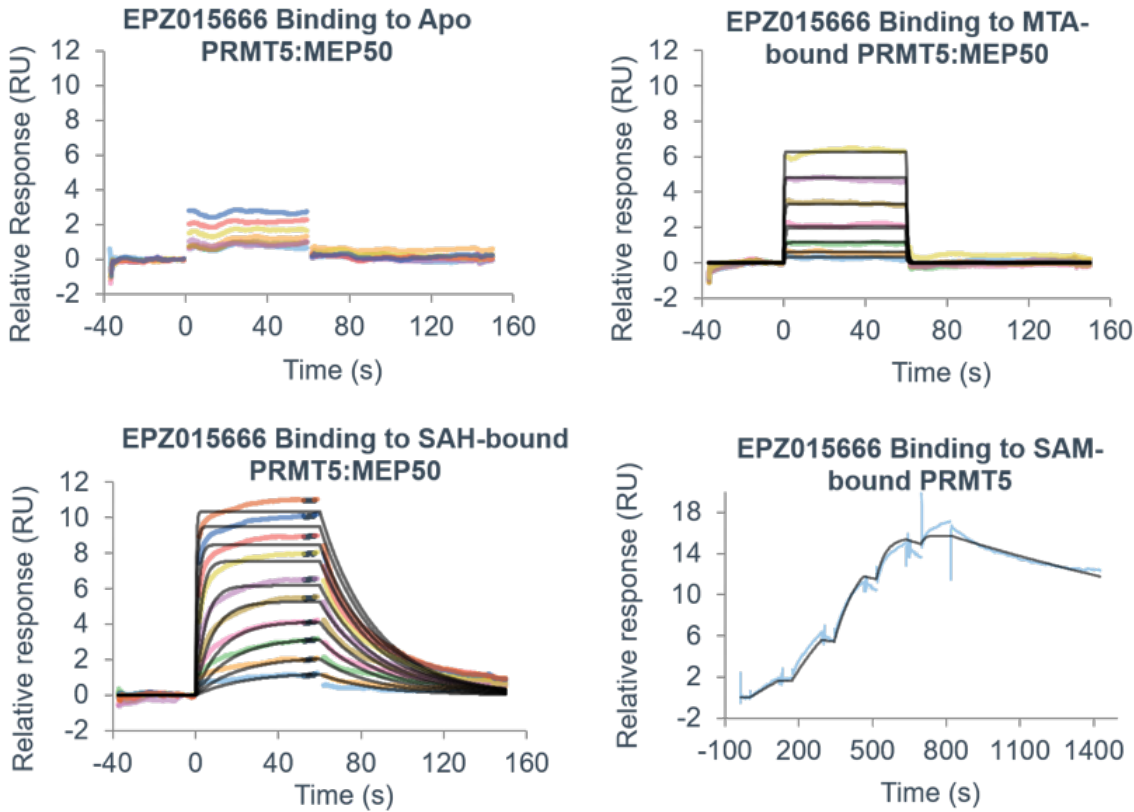
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https://www.reactionbiology.com/datasheet/prmt5_mep50_spr_malvern



Binding kinetics of reference compound (EPZ015666) on PRMT5:MEP50 with SAM and SAM analogs



Target	k_a (1/Ms)	k_d (1/s)	KD (M)
Apo PRMT5	Minimal signal changes/binding		
MTA-Bound PRMT5	6.46E+04	1.03E00	1.60E-05
SAH-Bound PRMT5	3.46E+04	3.64E-02	1.05E-06
SAM-Bound PRMT5	1.55E+05	4.76E-04	3.07E-09

Inhibitors of PRMT5 can be competitive, non-competitive, or uncompetitive with respect to SAM (or SAM-analogues) or substrate. To probe these distinct binding modes, the binding can be measured in the absence and presence of co-factors, such as SAM and SAM-analogues like SAH and MTA. Here, the binding of EPZ015666 to apo, MTA-bound, SAH-bound, and SAM-bound PRMT5:MEP50 is shown as an example of an inhibitor that binds preferentially to PRMT5 when the SAM-binding pocket is occupied. All data was collected using a Biacore 8K.

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