



Human SmD1 [His] (DAG4839)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Species	Human
Purity	>80% as determined by SDS-PAGE
Conjugate	His
Applications	WB
Molecular Weight	14 kDa
Format	Liquid
Concentration	Batch dependent - please inquire should you have specific requirements
Size	50 µg
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction

The Sm antigen is part of the spliceosomal complex catalyzing the splicing of nuclear pre-mRNA. Each spliceosome snRNP consists of snRNAs (U1, U2, U4/U6, and U5) bound to a unique set of proteins as well as a shared set of seven different Sm proteins with molecular weights between 9 and 29.5 kDa (typically SmB/SmB', SmD1, SmD2, SmD3, SmE, SmF, SmG). Most frequently the SmB and SmD polypeptides are targets of the anti-Sm specific autoimmune response, of which SmD is regarded the most SLE-specific Sm antigen. A specific feature of the SmD1, SmD3, and SmB/B' proteins is the methylation by protein arginine methyltransferase 5 (PRMT5), a type II methyltransferase. Also, this symmetrical dimethylation of arginine residues by PRMT5 in SmD1 and SmD3 seems to be important for regulating the

snRNP assembly

Keywords

Sm-proteins; SmD; Small nuclear ribonucleoprotein
