SmD1

Antigen Specification

Product Number: 11800

Description:
Human small nuclear ribonucleoprotein D1 polypeptide (SNRPD1; SmD1). Recombinant antigen for in vitro research and manufacturing use only.

Immunological function:
Binds IgG-type human auto-antibodies.

Origin:
Recombinant. Expressed by recombinant baculovirus (*Autographa californica* multiple nuclear polyhedrosis virus; AcMNPV) infection of *Spodoptera frugiperda* Sf9 insect cells. Expression conditions allow for introduction of symmetrical arginine dimethylation, thereby creating the main SmD1 autoepitope.

Expression construct:
Full-length cDNA coding for the human SmD1 protein fused to a hexa-histidine purification tag.

Biochemical tests:
SDS-PAGE (purity > 80%); Western blot with anti-Sm autoantibody-positive sample.

Calculated molecular weight of unmethylated SmD1 precursor:
14 kDa

Calculated isoelectric point of unmethylated SmD1 precursor:
pH 11.56

Immunological tests/Functionality:
Standard ELISA test (checkerboard analysis of positive/negative samples); immunodot analyses with positive/negative samples.

Recommended buffer/storage and handling conditions:
Recommendations for storage buffer: neutral to slightly alkaline pH and 20% glycerol as cryoprotective agent. Storage conditions: -70°C or below. Repeated freeze/thaw cycles should be avoided.

Coating concentration:
0.4-0.8 µg/mL (depending on the type of ELISA plate and coating buffer). Suitable for labeling of functional groups.