

## SmD1

### Antigen Specification

**Product Number: 11800**

**Description:**

Human small nuclear ribonucleoprotein D1 polypeptide (SNRPD1; SmD1). Recombinant antigen for research use or manufacturing 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 sera.

**Calculated molecular weight of unmethylated SmD1 precursor:**  
14,306 Dalton

**Calculated isoelectric point of unmethylated SmD1 precursor:**  
pH 11.56

**Immunological tests/Functionality:**

Standard ELISA test (checkerboard analysis of positive/negative sera panels); immunodot and microarray test with positive/negative sera panels.

**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.

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