

# Anti-Sm [Y12]

**Catalogue number:** 155237

**Sub-type:**

**Images:**

## Contributor

**Inventor:**

**Institute:** Yale University

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** Anti-Sm [Y12]

**Alternate name:**

**Class:** Monoclonal

**Conjugate:** Unconjugated

**Description:** Monoclonal antibody used in quantitative radioimmuno-assays in SLE patients.

Background and Research Application Sm is an autoantigen on a series of particles composed of RNA and protein. It is one of several nuclear proteins that are found commonly among U1, U2, U4/U6, and U5 small ribonucleoprotein particles (snRNPs). These snRNPs are involved in pre-mRNA splicing, and the encoded protein may also play a role in pre-mRNA splicing or snRNP structure. Sm is involved in the pathogenesis of Systemic lupus erythematosus (SLE), with antibodies to Sm being found in 20-30% of patients with SLE. This antibody can aid in the titration of autoantibody activity in the sera of SLE patients. Anti-Sm antibody can be used to help understand the role of snRNPs, particularly within disease.

**Purpose:**

**Parental cell:**

**Organism:**

**Tissue:**

**Model:**

**Gender:**

**Isotype:** IgG3 kappa

**Reactivity:**

**Selectivity:**

**Host:** Mouse

**Immunogen:** P27048

**Immunogen UNIPROT ID:** P27048

**Sequence:**

**Growth properties:**  
**Production details:**  
**Formulation:**  
**Recommended controls:**  
**Bacterial resistance:**  
**Selectable markers:**  
**Additional notes:**

## Target details

**Target:** Sm

**Target alternate names:**

**Target background:** Monoclonal antibody used in quantitative radioimmuno-assays in SLE patients  
Background and Research Application Sm is an autoantigen on a series of particles composed of RNA and protein. It is one of several nuclear proteins that are found commonly among U1, U2, U4/U6, and U5 small ribonucleoprotein particles (snRNPs). These snRNPs are involved in pre-mRNA splicing, and the encoded protein may also play a role in pre-mRNA splicing or snRNP structure. Sm is involved in the pathogenesis of Systemic lupus erythematosus (SLE), with antibodies to Sm being found in 20-30% of patients with SLE. This antibody can aid in the titration of autoantibody activity in the sera of SLE patients. Anti-Sm antibody can be used to help understand the role of snRNPs, particularly within disease.

**Molecular weight:**

**Ic50:**

## Applications

**Application:**  
**Application notes:**

## Handling

**Format:** Liquid  
**Concentration:** 0.9-1.1 mg/ml  
**Passage number:**  
**Growth medium:**  
**Temperature:**  
**Atmosphere:**  
**Volume:**  
**Storage medium:**  
**Storage buffer:** PBS with 0.02% azide  
**Storage conditions:**

4° C

**Shipping conditions:** Shipping at 4° C

## Related tools

**Related tools:**

## References

**References:** Campisi et al. 2016. Nat Immunol. 17(9):1084-92. PMID: 27455420. ; Feng et al. 2015. Nature. 528(7580):132-136. PMID: 26605529. ; Guo et al. 2015. Nat Immunol. 16(10):1051-9. PMID: 26322482. ; Janeway CA et al. 1984. J Immunol. 132(2):662-7. PMID: 6228596.

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