

52 kDa Ro/SSA (E-11): sc-48430

BACKGROUND

Ro autoantigens are of clinical significance because antibodies directed against them are found in most patients with primary Sjogren syndrome, subacute cutaneous lupus erythematosus (SLE), neonatal lupus erythematosus, ANA-negative lupus erythematosus and systemic lupus erythematosus-like disease secondary to homozygous C2 or C4 complement deficiency. Ro/SSA is a ribonucleoprotein that binds to autoantibodies in 35 to 50% of patients with SLE and in up to 97% of patients with Sjogren syndrome. The Ro/SSA particle consists of a single immunoreactive protein noncovalently bound with one of four small RNA molecules. Most anti-Ro/SSA-positive sera have antibodies not only against the immunoreactive protein, but also against an Ro/SSA protein. La/SSB is an autoimmune RNA-binding protein that plays a role in the transcription of RNA polymerase III was originally defined by its reactivity with autoantibodies from patients with Sjogren syndrome and SLE.

REFERENCES

1. Chambers, J.C., et al. 1988. Genomic structure and amino acid sequence domains of the human La autoantigen. *J. Biol. Chem.* 263: 18043-18051.
2. Itoh, K., et al. 1991. Protein heterogeneity in the human Ro/SSA ribonucleoproteins. The 52 and 60 kDa Ro/SSA autoantigens are encoded by separate genes. *J. Clin. Invest.* 87: 177-186.
3. Frank, M.B., et al. 1993. The mapping of the human 52 kDa Ro/SSA autoantigen gene to human chromosome 11, and its polymorphisms. *Am. J. Hum. Genet.* 52: 183-191.
4. Chan, E.K., et al. 1994. Human 60 kDa SSA/Ro ribonucleoprotein autoantigen gene (SSA2) localized to 1q31 by fluorescence *in situ* hybridization. *Genomics* 23: 298-300.
5. LocusLink Report (LocusID: 600063). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: TRIM21 (human) mapping to 11p15.4.

SOURCE

52 kDa Ro/SSA (E-11) is a mouse monoclonal antibody raised against amino acids 141-280 of 52 kDa Ro/SSA of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

52 kDa Ro/SSA (E-11) is recommended for detection of 52 kDa Ro/SSA of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for 52 kDa Ro/SSA siRNA (h): sc-40917, 52 kDa Ro/SSA shRNA Plasmid (h): sc-40917-SH and 52 kDa Ro/SSA shRNA (h) Lentiviral Particles: sc-40917-V.

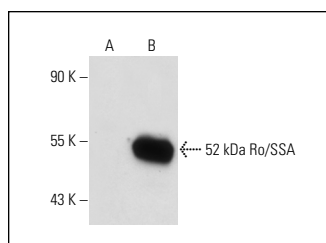
Molecular Weight of 52 kDa Ro/SSA: 52 kDa.

Positive Controls: 52 kDa Ro/SSA (h): 293T Lysate: sc-158201, AML-193 whole cell lysate: sc-364182 or HL-60 whole cell lysate: sc-2209.

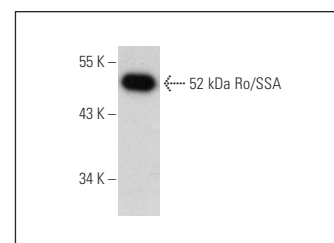
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA




52 kDa Ro/SSA (E-11): sc-48430. Western blot analysis of 52 kDa Ro/SSA expression in non-transfected: sc-117752 (A) and human 52 kDa Ro/SSA transfected: sc-158201 (B) 293T whole cell lysates.



52 kDa Ro/SSA (E-11): sc-48430. Western blot analysis of 52 kDa Ro/SSA expression in AML-193 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Guha, A., et al. 2020. Negative feedback regulation by HuR controls TRIM21 expression and function in response to UV radiation. *Sci. Rep.* 10: 11753.
2. Simoes Eugénio, M., et al. 2021. TRIM21, a new component of the TRAIL-induced endogenous necrosome complex. *Front. Mol. Biosci.* 8: 645134.



See **52 kDa Ro/SSA (D-12): sc-25351** for 52 kDa Ro/SSA antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.