

Y14 (Q-24): sc-134154

BACKGROUND

The exon junction complex (EJC) is a multiprotein complex that assembles approximately 20-24 nucleotides upstream of exon-exon junctions in pre-mRNAs. It is involved in mRNA export, cytoplasmic localization, and non-sense-mediated mRNA decay. Members of the EJC include Y14, ALY/REF, MAGOH, RNPS1, SRm160 and DEK. ALY/REF, MAGOH and Y14, identified as RBM8 in mouse and rat, make up the core of the EJC and these proteins remain stably bound to spliced mRNAs in the cytoplasm until they are translated. Therefore, Y14, ALY/REF and MAGOH have the ability to communicate to the cytoplasm the processing history of the mRNA, including the position of the removed introns. The gene encoding human Y14 encodes three transcripts. Y14 is a ubiquitously expressed protein. Although Y14 shuttles to the cytoplasm, it is predominantly detected in the nucleus and is co-localized with oskar mRNA at the posterior pole of the cell.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RBM8A (human) mapping to 1q21.1; Rbm8a (mouse) mapping to 3 F2.1.

SOURCE

Y14 (Q-24) is a Protein A purified rabbit polyclonal antibody raised against synthetic Y14 peptide of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

Y14 (Q-24) is recommended for detection of Y14 of human origin and RBM8 of mouse and rat 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), immunohistochemistry (including paraffin-embedded sections) (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 Y14 siRNA (h): sc-38345, RBM8 siRNA (m): sc-38346, Y14 shRNA Plasmid (h): sc-38345-SH, RBM8 shRNA Plasmid (m): sc-38346-SH, Y14 shRNA (h) Lentiviral Particles: sc-38345-V and RBM8 shRNA (m) Lentiviral Particles: sc-38346-V.

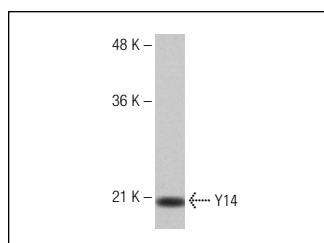
Molecular Weight of Y14: 24 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or HeLa nuclear extract: sc-2120.

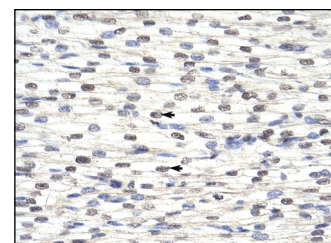
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Y14 (Q-24): sc-134154. Western blot analysis of Y14 expression in Jurkat whole cell lysate.



Y14 (Q-24): sc-134154. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human heart tissue showing nuclear localization.

STORAGE

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