

Rabbit Anti-LSM14A/RAP55 Polyclonal: RC0156

Intended Use: For Research Use Only

Description: The LSM14 domain and the RGG repeats of RAP55 are required for accumulation in P-bodies, and the region containing the FDF motif is responsible for cytoplasmic retention. RAP55, and all other Sm-like proteins, contain the Sm sequence motif, which consists of two regions separated by a linker of variable length that folds as a loop. The Sm-like proteins are thought to form a stable heteromer present in tri-snRNP particles, which are important for pre-mRNA splicing. LSM14A is a key innate immunity component of the processing body (P-body) that mediates interferon-beta (IFN-beta) signaling by viral RNA. Knockdown of LSM14A inhibits cytosolic RNA- and DNA-trigger type I IFN production and cellular antiviral response. Moreover, LSM14A is essential for early-phase induction of IFN-beta after either RNA or DNA virus infection. chicken LSM14A (cLSM14A) is an important sensor that mediates innate immunity in the chicken against NDV infections.

Specifications

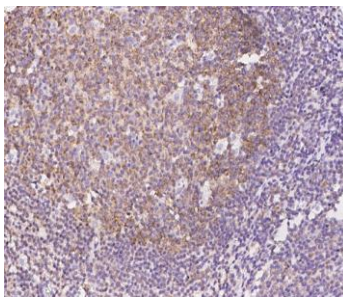
Clone: Polyclonal
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Immunogen: Synthetic peptide corresponding to the N-terminus of the Human LSM14A
 Localization: Nucleus
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC, WB
 Package:

Description	Catalog No.	Size
LSM14A/RAP55 Polyclonal Concentrated	RC0156	1 ml

IHC Procedure*

Positive Control Tissue: Tonsil, skin
 Concentrated Dilution: 25-100
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: Overnight @ 4°C
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human tonsil stained with anti-LSM14A using DAB

References:

1. Gold nanourchins induce cellular stress, impair proteostasis and damage RNA. Dana M Samhadaneh, et al. Nanomedicine. Nov;22:102083, 2019.
2. Localization and role of RAP55/LSM14 in HeLa cells: a new finding on the mitotic spindle assembly. Donia Mili, Acta Biochim Pol. 62(3):613-9, 2015.