

## RNase 6 (M-14): sc-163296

### BACKGROUND

RNase 6 (Ribonuclease K6) is a 150 amino acid ribonuclease that belongs to the pancreatic ribonuclease family, which itself is included in the RNase A superfamily. Gene products belonging to the Ribonuclease A superfamily are pancreatic ribonucleases that cleave single-stranded RNA. RNase 6 is a secreted protein that likely plays a role in host immunological defense. RNase 6 shows strong expression in lung, heart, placenta, kidney, pancreas, liver, brain and skeletal muscle. RNase 6 is also expressed in monocytes and neutrophils. The RNase1 gene is conserved in chimpanzee, canine, bovine, mouse and rat, and maps to human chromosome 14q11.2, where it is linked to 7 other RNase A superfamily genes. The entire RNase A cluster spans 368 kb.

### REFERENCES

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- Domachowske, J.B., Dyer, K.D., Adams, A.G., Leto, T.L. and Rosenberg, H.F. 1998. Eosinophil cationic protein/RNase 3 is another RNase A-family ribonuclease with direct antiviral activity. *Nucleic Acids Res.* 26: 3358-3363.
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- Pietrowski, D. and Förster, M. 2000. Complete cDNA sequence and amino acid analysis of a bovine ribonuclease K6 gene. *DNA Seq.* 11: 365-371.
- Bai, X., Liang, Z., Zhao, S., Liu, X., Zhu, M., Wu, Z. and Yu, M. 2009. The porcine ANG, RNASE1 and RNASE6 genes: molecular cloning, polymorphism detection and the association with haematological parameters. *Mol. Biol. Rep.* 36: 2405-2411.

### CHROMOSOMAL LOCATION

Genetic locus: Rnase6 (mouse) mapping to 14 C1.

### SOURCE

RNase 6 (M-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RNase 6 of mouse origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-163296 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

RNase 6 (M-14) is recommended for detection of RNase 6 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other RNase family members.

Suitable for use as control antibody for RNase 6 siRNA (m): sc-152992, RNase 6 shRNA Plasmid (m): sc-152992-SH and RNase 6 shRNA (m) Lentiviral Particles: sc-152992-V.

Molecular Weight of RNase 6: 17 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### 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.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.