## BACKGROUND

MORN5 (MORN repeat containing 5) is a 161 amino acid protein that contains 3 MORN repeats and is encoded by a gene that maps to human chromosome $9 q 33.2$ and mouse chromosome 2 B. Human chromosome 9 contains 145 million base pairs and comprises $4 \%$ of the human genome, encoding nearly 900 genes. Hereditary hemorrhagic telangiectasia and familial dysautonomia are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster. Chromosome 9 is partnered with chromosome 22 in translocations that lead to the aberrant production of a BCR-ABL fusion protein often found in leukemias.

## REFERENCES

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2. Zhuang, H., et al. 2006. Lupus-like disease and high interferon levels corresponding to trisomy of the type I interferon cluster on chromosome 9p. Arthritis Rheum. 54: 1573-1579.
3. Burmeister, T., et al. 2007. Atypical BCR-ABL mRNA transcripts in adult acute lymphoblastic leukemia. Haematologica 92: 1699-1702.
4. Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (rendu-osler disease). Respiration 74: 361-378.
5. Zeitz, M.J., et al. 2009. Organization of the amplified type I interferon gene cluster and associated chromosome regions in the interphase nucleus of human osteosarcoma cells. Chromosome Res. 17: 305-319.
6. Gold-von Simson, G., et al. 2009. Kinetin in familial dysautonomia carriers: implications for a new therapeutic strategy targeting mRNA splicing. Pediatr. Res. 65: 341-346.
7. Axelrod, F.B., et al. 2010. Neuroimaging supports central pathology in familial dysautonomia. J. Neurol. 257: 198-206.

## CHROMOSOMAL LOCATION

Genetic locus: MORN5 (human) mapping to 9q33.2.

## SOURCE

MORN5 ( $\mathrm{N}-15$ ) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N -terminus of MORN5 of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{glg}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

Blocking peptide available for competition studies, sc-243505 P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \%$ BSA).

## STORAGE

Store at $4^{\circ}$ C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

MORN5 ( $\mathrm{N}-15$ ) is recommended for detection of MORN5 of human 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 MORN family members.
MORN5 ( $\mathrm{N}-15$ ) is also recommended for detection of MORN5 in additional species, including equine and porcine.
Suitable for use as control antibody for MORN5 siRNA (h): sc-92569,
MORN5 shRNA Plasmid (h): sc-92569-SH and MORN5 shRNA (h) Lentiviral Particles: sc-92569-V.

Molecular Weight of MORN5: 19 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: 1:1001:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

