

pierce 1 (S-16): sc-241611

BACKGROUND

Pierce 1, also known as UPF0691 protein C9orf116, is a 136 amino acid protein that belongs to the UPF0691 family. Pierce 1 exists as two alternatively spliced isoforms, which are conserved in chimpanzee, dog, cow, mouse and rat. Pierce 1 is predominantly expressed in micrometastases and macrometastases of human small cell lung cancer. Pierce 1 is encoded by a gene that maps to chromosome 9, which consists of about 145 million bases, makes up 4% of the human genome and encodes nearly 900 genes. Notably, chromosome 9 encompasses the largest interferon family gene cluster. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, is associated with chromosome 9.

REFERENCES

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2. Kakiuchi, S., et al. 2003. Genome-wide analysis of organ-preferential metastasis of human small cell lung cancer in mice. *Mol. Cancer Res.* 1: 485-499.
3. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. *Nature* 429: 369-374.
4. Fernandez-L, A., et al. 2007. Gene expression fingerprinting for human hereditary hemorrhagic telangiectasia. *Hum. Mol. Genet.* 16: 1515-1533.
5. Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (Rendu-Osler disease). *Respiration* 74: 361-378.
6. Baines, K.J., et al. 2009. The nutrigenomics of asthma: molecular mechanisms of airway neutrophilia following dietary antioxidant withdrawal. *OMICS* 13: 355-365.

CHROMOSOMAL LOCATION

Genetic locus: C9orf116 (human) mapping to 9q34.3; 1700007K13Rik (mouse) mapping to 2 A3.

SOURCE

pierce 1 (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of pierce 1 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-241611 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

pierce 1 (S-16) is recommended for detection of pierce 1 of mouse, rat and 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).

Suitable for use as control antibody for pierce 1 siRNA (h): sc-92661, pierce 1 siRNA (m): sc-152249, pierce 1 shRNA Plasmid (h): sc-92661-SH, pierce 1 shRNA Plasmid (m): sc-152249-SH, pierce 1 shRNA (h) Lentiviral Particles: sc-92661-V and pierce 1 shRNA (m) Lentiviral Particles: sc-152249-V.

Molecular Weight of pierce 1: 15 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.

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.