

PIERCE1 Antibody

Catalog # ASC11442

Specification

PIERCE1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, ICC <u>Q5BN46</u> <u>Q5BN46</u>, <u>115430217</u> Human, Mouse Rabbit Polyclonal IgG PIERCE1 antibody can be used for detection of PIERCE1 by Western blot at 1 μg/mL. Antibody can also be used for immunocytochemistry starting at 2.5 μg/mL.

PIERCE1 Antibody - Additional Information

Gene ID 138162 Target/Specificity C9orf116; PIERCE1 antibody is predicted to not cross-react with other UPF0691 family members.

Reconstitution & Storage

PIERCE1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions PIERCE1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PIERCE1 Antibody - Protein Information

Name PIERCE1 (HGNC:28435)

Function

Microtubule inner protein involved in the attachment of outer dynein arms (ODAs) to dynein-decorated doublet microtubules (DMTs) in cilia axoneme, which is required for motile cilia beating (PubMed:36191189). Functions at the initial step of left-right asymmetry specification of the visceral organs.

Cellular Location Cytoplasm, cytoskeleton, cilium axoneme

Tissue Location Expressed in airway epithelial cells.



PIERCE1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PIERCE1 Antibody - Images



Western blot analysis of PIERCE1 in A20 cell lysate with PIERCE1 antibody at 1 μ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunocytochemistry of PIERCE1 in A20 cells with PIERCE1 antibody at 2.5 µg/mL.

PIERCE1 Antibody - Background

PIERCE1 Antibody: PIERCE1, also known as C9orf116, is an important p53 target gene contributing to normal DNA damage response and may play crucial roles in maintaining genomic integrity against genotoxic stresses, including UVC irradiation. PIERCE1 exists as two alternatively spliced



isoforms and is predominantly expressed in human small cell lung cancer. PIERCE1 knockdown induces down-regulation of proapoptotic genes including Ei24, Apaf1 and PTEN, suggesting that PIERCE1 is a proapoptotic gene. It is helpful for in-depth understanding of p53 pathways and the design of new cancer therapies.

PIERCE1 Antibody - References

Sung YH, Kim HJ, Devkota S, et al. Pierce1, a novel p53 target gene contributing to the ultraviolet-induced DNA damage response. Cancer Res. 2010; 70:10454-63.

Zhou BB and Elledge SJ. The DNA damage response: putting checkpoints in perspective. Nature 2000; 408:433-9.

Sung YH, Kim HJ, Lee HW, et al. Identification of a novel Rb-regulated gene associated with the cell cycle. Mol. Cells 2007; 24:409-15.

Kakiuchi S, Daigo Y, Tsunoda T, et al. 2003. Genome-wide analysis of organ-preferential metastasis of human small cell lung cancer in mice. Mol. Cancer Res. 1:485-99.