

PIERCE1 Antibody

Catalog # ASC11442

Product Information

Application	WB, ICC, E
Primary Accession	Q5BN46
Other Accession	Q5BN46 , 115430217
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	15260
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PIERCE1 antibody can be used for detection of PIERCE1 by Western blot at 1 μ g/mL. Antibody can also be used for immunocytochemistry starting at 2.5 μ g/mL.

Additional Information

Gene ID	138162
Other Names	UPF0691 protein C9orf116, p53-induced expression in RB-null cells protein 1, Pierce1, C9orf116
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.

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. Cytoplasm, cytoskeleton, flagellum axoneme {ECO:0000250 UniProtKB:Q5BN45}

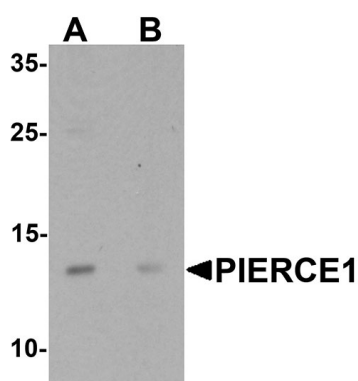
Background

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.

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.

Images



Western blot analysis of PIERCE1 in A20 cell lysate with PIERCE1 antibody at 1 $\mu\text{g/mL}$ in (A) the absence and (B) the presence of blocking peptide.



Immunocytochemistry of PIERCE1 in A20 cells with PIERCE1 antibody at 2.5 $\mu\text{g/mL}$.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.