

WFDC2 Antibody

Catalog # ASC11692

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q14508
Other Accession	NP_006094 , 56699495
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	12993
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	WFDC2 antibody can be used for detection of WFDC2 by Western blot at 1 - 2 μ g/ml.

Additional Information

Gene ID	10406
Other Names	WAP four-disulfide core domain protein 2, Epididymal secretory protein E4, Major epididymis-specific protein E4, Putative protease inhibitor WAP5, WFDC2, HE4, WAP5
Target/Specificity	WFDC2; WFDC2 antibody is human specific. Multiple isoforms of WFDC2 are known to exist.
Reconstitution & Storage	WFDC2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	WFDC2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	WFDC2 (HGNC:15939)
Function	Plays a critical role in lung development (By similarity). Required for terminal differentiation of bronchiole club cells (By similarity). Required for development of airway barrier mechanisms, such as lamellar body formation in type II alveolar epithelial cells and cilia formation on ciliated epithelial cells following initiation of respiration at birth (By similarity). Required for type I alveolar epithelial cell and vascular endothelial development in the lungs, thereby mediating blood-air barrier exchange (By similarity).
Cellular Location	Secreted.

Tissue Location

Expressed in lung, trachea, kidney, breast, fallopian tubes, endometrium, cervix, epididymis and prostate

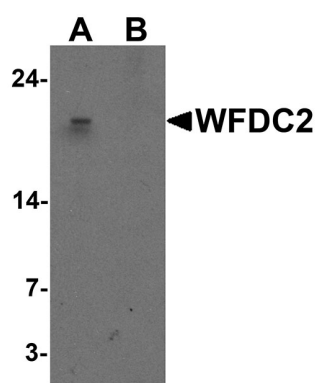
Background

The WAP four-disulfide core domain protein 2 (WFDC2), also known as epididymal protein 4, is a member of the WFDC domain family, a family of proteins that is characterized by the presence of Whey Acidic Protein (WAP) domain, and is highly expressed in the lung and salivary gland (1,2). Members of this family include SLPI and elafin, antiproteinases involved in the innate immune system (2). WFDC2 has been proposed to play a critical role in tumor formation and growth in ovarian cancer cells through the regulation of growth- and apoptosis-associated genes and may thus be a potential therapeutic target for epithelial ovarian cancer (3).

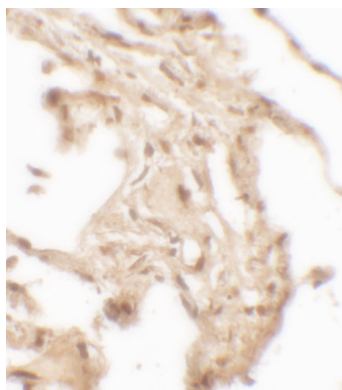
References

Drapkin R, von Horsten HH, Lin Y, et al. Human epididymis protein 4 (HE4) is a secreted glycoprotein that is overexpressed by serious and endometrioid ovarian carcinomas. *Cancer Res.* 2005; 65:2162-9.
Bingle L, Cross SS, High AS, et al. WFDC2 (HE4): A potential role in the innate immunity of the oral cavity and respiratory tract and the development of adenocarcinomas of the lung. *Resp. Res.* 2006; 7:61.
Chen Y, Mu X, Wang S, et al. WAP four-disulfide core domain protein 2 mediates the proliferation of human ovarian cancer cells through the regulation of growth- and apoptosis-associated genes. *Oncol. Rep.* 2013; 29:288-96.

Images

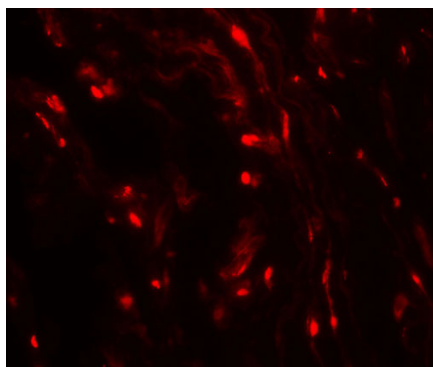


Western blot analysis of WFDC2 in A549 cell lysate with WFDC2 antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of WFDC2 in human lung tissue with WFDC2 antibody at 2.5 µg/mL.

Immunofluorescence of WFDC2 in human lung tissue with WFDC2 antibody at 20 µg/mL.



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