

### WFDC2 Antibody

Catalog # ASC11692

## **Specification**

## **WFDC2 Antibody - Product Information**

**Application** WB, IHC, IF **Primary Accession** Q14508

Other Accession NP 006094, 56699495

Reactivity Human Host Rabbit Clonality **Polyclonal** laG

Isotype

Calculated MW Predicted: 14 kDa

Observed: 20kDa KDa

**Application Notes** WFDC2 antibody can be used for detection

of WFDC2 by Western blot at 1 - 2 μg/ml.

### **WFDC2 Antibody - Additional Information**

Gene ID 10406

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.

## **WFDC2 Antibody - Protein Information**

Name WFDC2

Synonyms HE4, WAP5

Function

Broad range protease inhibitor.

**Cellular Location** 

Secreted

#### **Tissue Location**

Expressed in a number of normal tissues, including male reproductive system, regions of the respiratory tract and nasopharynx. Highly expressed in a number of tumors cells lines, such ovarian, colon, breast, lung and renal cells lines. Initially described as being exclusively transcribed in the epididymis

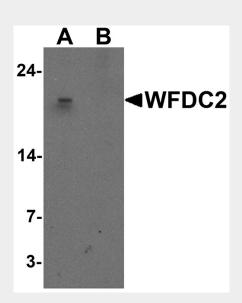


## **WFDC2 Antibody - Protocols**

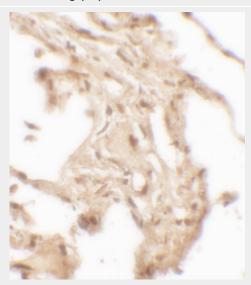
Provided below are standard protocols that you may find useful for product applications.

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

# **WFDC2 Antibody - Images**

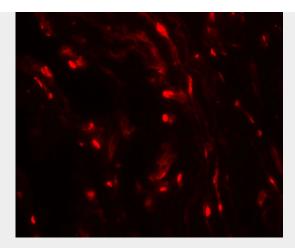


Western blot analysis of WFDC2 in A549 cell lysate with WFDC2 antibody at 1  $\mu$ g/ml in (A) the absence and (B) the presence of blocking peptide.



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  $\mu g/mL$ .

## WFDC2 Antibody - 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).

#### **WFDC2 Antibody - 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.