

# Canine WAP5 / WFDC2 / HE4 Protein (Fc Tag)



Sino Biological  
Biological Solution Specialist

Catalog Number: 70012-D02H

## General Information

### Gene Name Synonym:

WFDC2

### Protein Construction:

A DNA sequence encoding the canine WFDC2 (Met1-Phe124) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

**Source:** Canine

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Gly 28

### Molecular Mass:

The recombinant canine WFDC2/Fc is a disulfide-linked homodimer. The reduced monomer comprises 338 amino acids and has a predicted molecular mass of 37.3 kDa. The apparent molecular mass of the protein is approximately 48 kDa in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

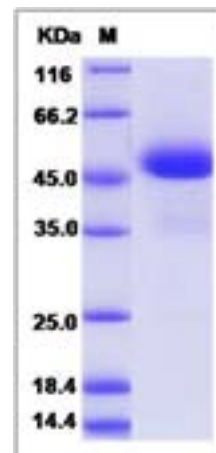
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

WAP four-disulfide core domain protein 2, also known as Epididymal secretory protein E4, Major epididymis-specific protein E4, Putative protease inhibitor WAP5, WFDC2 and HE4, is a secreted protein which contains two WAP domains. WFDC2 / HE4 is a member of a family of stable 4-disulfide core proteins that are secreted at high levels. It is expressed in a number of normal tissues, including male reproductive system, regions of the respiratory tract and nasopharynx. It is 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 may be a component of the innate immune defences of the lung, nasal and oral cavities and suggest that WFDC2 functions in concert with related WAP domain containing proteins in epithelial host defence. WFDC2 re-expression in lung carcinomas may prove to be associated with tumour type and should be studied in further detail. Mammary gland expression of tammur WFDC2 during the course of lactation showed WFDC2 was elevated during pregnancy, reduced in early lactation and absent in mid-late lactation. WFDC2 / HE4 can undergo a complex series of alternative splicing events that can potentially yield five distinct WAP domain containing protein isoforms.

## References

1. Bingle, L. et al., 2002, *Oncogene*. 21 (17):2768-73. 2. Hellström, I. et al., 2003, *Cancer Res*. 63 (13):3695-700. 3. Bingle, L. et al., 2006, *Respir Res*. 7: 61.

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