

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant Vaspin, Human

Catalog Number: BK0179-50µg

Source: Escherichia coli.

Quantity: 50µg

### Description:

Vaspin is a cytokine originally identified in visceral adipose tissue of Otsuka Long-Evans Tokushima fatty rats, and the name "Vaspin" is short for visceral adipose tissue-derived serine protease inhibitor. Besides the visceral adipose, Vaspin is also expressed in the skin, hypothalamus, pancreatic islets and stomach, and is shown to exert an anti-inflammatory role by inhibiting several proinflammatory adipokines such as leptin, resistin, and Tumor Necrosis Factor- $\alpha$ . Vaspin also stimulates adiponectin expression and improves insulin sensitivity in mice. Vaspin expression has been shown to decrease with worsening of diabetes and body weight loss. Accordingly, administration of recombinant human Vaspin improved glucose tolerance in diet regulated mice suggesting it as a potential target for obese-related diseases. Recombinant human Vaspin (rhVaspin) produced in E.coli is a single non-glycosylated polypeptide chain containing 394 amino acids. rhVaspin has a molecular mass of 45.1kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

### Molecular Weight:

45.1 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% by SDS-PAGE and HPLC analyses.

### Biological Activity:

Bioassay data are not available.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

LKPSFSPRNYKALSEVQGQWKQRMAAKE-  
LARQNMDLGFKLLKLAFYNPGRNIFLSPL-  
SISTAFSMLCLGAQDSTLDEIKQGFNFRK-  
MPEKDLHEGFHYIIHELTQKTQDLKLSIGN-  
TLFIDQRLQPQRKFLEDAKNFYSAETILT-  
NFQNLEMAQKQINDFISQKTHGKINNLIEN-  
IDPGTVMLLANYIFFRARWKHEFDPNVTKEED-  
FFLEKNSSVKVPMFMRSGIYQVGYDDKLSC-  
TILEIP-  
YQKNITAIFILPDEGKCLKHLEKGLQVDTFSRWKT  
LLSRRVVDVSVPR LHMTGTFDLKKTLSYIGV-  
SKIFEEHGDLTKIAPHRSLKVGAVHKAELK-  
MDERGTEGAAGTGAQTLPMET-  
PLVVKIDKPYLLLIYSEKIPSVLFLGKIVNPIGK

### Endotoxin:

< 0.2 EU/µg, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O at 100 µg/mL.

### Storage:

Lyophilized recombinant human Vaspin (rhVaspin) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rhVaspin remains stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

### Usage:

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