

## Datasheet for ABIN7317482

# **SERPINA12 Protein (His tag)**



#### Overview

| Quantity:                     | 100 μg   |
|-------------------------------|--|
| Target:                       | SERPINA12  |
| Origin:                       | Human  |
| Source:                       | HEK-293 Cells                                    |
| Protein Type:                 | Recombinant                                      |
| Biological Activity:          | Active   |
| Purification tag / Conjugate: | This SERPINA12 protein is labelled with His tag. |

### **Product Details**

| Purpose:                     | Recombinant Human Vaspin/SerpinA12 Protein (His Tag)(Active)  |
|------------------------------|---|
| Sequence:                    | Met 1-Lys 414   |
| Characteristics:             | A DNA sequence encoding the human SERPINA12 (NP_776249.1) (Met 1-Lys 414) was expressed, with a polyhistidine tag at the C-terminus.                    |
| Purity:                      | > 97 % as determined by reducing SDS-PAGE.  |
| Endotoxin Level:             | < 1.0 EU per µg as determined by the LAL method.  |
| Biological Activity Comment: | Measured by its ability to inhibit KLK7 cleavage the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH2 (Catalog # ES002). The IC50 is <75 nM. |

## Target Details

| Target: | SERPINA12 |
|---------|-----------|
|         |           |

## Target Details

| Alternative Name:   | Vaspin/SerpinA12 (SERPINA12 Products)   |
|---------------------|---|
| Background:         | Background: Serpins are the largest and most diverse family of protease inhibitors. Most              |
|                     | serpins control proteolytic cascades, certain serpins do not inhibit enzymes, but instead             |
|                     | perform diverse functions such as storage (ovalbumin, in egg white), hormone carriage proteins        |
|                     | (thyroxine-binding globulin, cortisol-binding globulin) and tumor suppressor genes (maspin).          |
|                     | Most inhibitory serpins target chymotrypsin-like serine proteases. These enzymes are defined          |
|                     | by the presence of a nucleophilic serine residue in their catalytic site. Some serpins inhibit other  |
|                     | classes of protease. A number of such serpins have been shown to target cysteine proteases.           |
|                     | These enzymes differ from serine proteases in that they are defined by the presence of a              |
|                     | nucleophilic cysteine residue, rather than a serine residue, in their catalytic site. SerpinA12, also |
|                     | known as OL-64, Visceral adipose tissue-derived serine protease inhibitor, Vaspin, Visceral           |
|                     | adipose-specific serpin and SERPINA12, is a secreted protein which belongs to the serpin              |
|                     | family. SerpinA12 / Vaspin is expressed in visceral adipose tissues. It may modulates insulin         |
|                     | action conceivably only in the presence of its yet undefined target proteases in white adipose        |
|                     | tissues. SerpinA12 / Vaspin may be the compensatory molecule in the pathogenesis of                   |
|                     | metabolic syndrome and SerpinA12 / Vaspin recombinant protein or vaspin-mimicking agents              |
|                     | such as vaspin analogs, antibodies or small molecule agents may be the link to drug discovery         |
|                     | and development.  |
|                     | Synonym: Serpin A12; OL-64; Visceral Adipose Tissue-Derived Serine Protease Inhibitor; Vaspin;        |
|                     | Visceral Adipose-Specific Serpin; SERPINA12   |
| Molecular Weight:   | 46.5 kDa  |
| NCBI Accession:     | NP_776249   |
| Application Details |   |
| Restrictions:       | For Research Use only   |
| Handling            |   |
| Format:             | Lyophilized   |
| Reconstitution:     | Please refer to the printed manual for detailed information.  |
| Buffer:             | Lyophilized from sterile PBS, pH 7.4  |
| Storage:            | 4 °C,-20 °C,-80 °C  |
| Storage Comment:    | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.           |

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.