

## Vaspin Protein, Human

Cat. No.:	HY-P7419
Synonyms:	rHuVaspin; Serpin A12; OL-64
Species:	Human
Source:	E. coli
Accession:	Q8IW75 (L21-K414)
Gene ID:	145264
Molecular Weight:	40-50 kDa

### PROPERTIES

AA Sequence	<pre> L K P S F S P R N Y   K A L S E V Q G W K   Q R M A A K E L A R   Q N M D L G F K L L K K L A F Y N P G R   N I F L S P L S I S   T A F S M L C L G A   Q D S T L D E I K Q G F N F R K M P E K   D L H E G F H Y I I   H E L T Q K T Q D L   K L S I G N T L F I D Q R L Q P Q R K F   L E D A K N F Y S A   E T I L T N F Q N L   E M A Q K Q I N D F I S Q K T H G K I N   N L I E N I D P G T   V M L L A N Y I F F   R A R W K H E F D P N V T K E E D F F L   E K N S S V K V P M   M F R S G I Y Q V G   Y D D K L S C T I L E I P Y Q K N I T A   I F I L P D E G K L   K H L E K G L Q V D   T F S R W K T L L S R R V V D V S V P R   L H M T G T F D L K   K T L S Y I G V S K   I F E E H G D L T K I A P H R S L K V G   E A V H K A E L K M   D E R G T E G A A G   T G A Q T L P M E T P L V V K I D K P Y   L L L I Y S E K I P   S V L F L G K I V N   P I G K           </pre>
Biological Activity	Data is not available.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS or 20 mM PB, 150 mM NaCl, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

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## Background

Vaspin is a beneficial adipokine counteracting insulin-resistance and inflammatory processes in obese mice. vaspin can alleviate ischaemia/reperfusion (I/R) injury in the heart by suppressing myocardial apoptosis through AMPK-mTOR-dependent activation of autophagic flux, and then provided a potential breakthrough in the treatment of myocardial I/R injury and other ischaemic diseases<sup>[1][2]</sup>. In addition, vaspin induces activation of the PI3K/AKT axis, independent of insulin receptor activation, promotes GLUT4 expression and translocation and sensitises older obese human skeletal muscle to insulin-mediated glucose uptake<sup>[3]</sup>.

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## REFERENCES

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[1]. Yang F, et al. Vaspin alleviates myocardial ischaemia/reperfusion injury via activating autophagic flux and restoring lysosomal function. *Biochem Biophys Res Commun.* 2018 Sep 5;503(2):501-507.

[2]. Zieger K, et al. Vaspin suppresses cytokine-induced inflammation in 3T3-L1 adipocytes via inhibition of NFκB pathway. *Mol Cell Endocrinol.* 2018 Jan 15;460:181-188.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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