

## IGFBP-1 Protein, Canine (HEK293, His)

Cat. No.:	HY-P74849
Synonyms:	Insulin-like growth factor-binding protein 1; PP12; IBP-1;
Species:	Canine
Source:	HEK293
Accession:	XP_005629556.1 (T26-S249)
Gene ID:	480812
Molecular Weight:	Approximately 27 kDa

### PROPERTIES

AA Sequence	<p>T P Q P W H C A P C      T P E K L A L C P P      V P A S C A E T A L      P A G C G C C P M C</p> <p>A L P Q D A P C G V      A T A R C A T G L S      C R A A P G E E R P      L H A L I R G R G V</p> <p>C V P T D P A A D A      K E S S E S S E I T      Q E Q L L E N F H L      M V P S E E D T P I</p> <p>L W N A V R N Y K T      V R S D D S D K L K      E P C R R E L H E V      L A R L A E E Q A S</p> <p>R Q L Y S F Y L P N      C N K N G F Y H S R      Q C K T A M D G Q R      G L C W C V Y P W N</p> <p>G E R I P G S V E V      R G D P N C G Q Y F      T G H S</p>
Biological Activity	Measured by its ability to inhibit the biological activity of IGF-I on MCF 7 human breast cancer cells. The ED <sub>50</sub> this effect is 0.5299 µg/mL, corresponding to a specific activity is 1.887×10 <sup>3</sup> U/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, 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

Background	Insulin-like growth factor-binding protein 1 (IBP-1), also known as placental protein 12 (PP12), It's a protein encoded by the IGFBP1 gene. Igfbp-1 is a member of the insulin-like growth factor binding protein (IGFBP) family that binds insulin-like growth factor (IGFs) I and II and circulates in plasma. The binding of the IGFBP-1 protein prolongs the half-life of IGFs and
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alters their interaction with cell surface receptors. IGFBP-1 can promote cell migration and has the same binding affinity for IGF1 and IGF2. IGFBP-1 inhibits proliferation, invasion, migration and apoptosis of HTR-8/SVneo cells by inducing MMP-26 expression. IGFBP1 may be a new prognostic factor and a target of molecular targeted therapy for gastric cancer<sup>[1][2][3]</sup>.

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

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