

# Product information



## AIMP3/p18 (IB-03-0003)

**Catalog No.** : IB-03-0003

**Product Name** : Aminoacyl tRNA synthetase complex-interacting multifunctional protein 3 Protein

**Lot No.** : PCP23-HN

**Molecular Weight** : 18kDa

**Protein Construction** : full length

**Source** : Human

**Purification** : Multi-step chromatography

**Expression system** : Recombinant human AIMP3 expressed by *E.coli*.

**Conjugate/Tag** : N-term 6XHis tag

**Background** : Component of the multisynthase complex which is comprised of a bifunctional glutamyl-prolyl-tRNA synthase, the monospecific isoleucyl, leucyl, glutamyl, methionyl, lysyl, arginyl and aspartyl-tRNA synthases, and three auxiliary proteins, EEF1E1/p18, AIMP2/p38 and AIMP1/p43. p18 is a cofactor of multi-ARS complex and regulates p53 through the interaction with ATM/ATR

**Storage buffer** : 1X PBS(pH7.2) 200mM NaCl 20% Glycerol

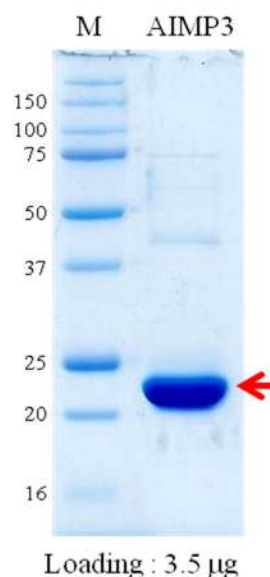
**Storage instruction** : Store at -70°C.

**Purity** : >95%

**Quantity** : 50µg

**Concentration** : 0.50mg/ml

**Application** : Western blot, ELISA, antibody production, protein array, activity assay.



## Reference :

1. AIMP3/p18 Controls Translational Initiation by Mediating the Delivery of Charged Initiator tRNA to Initiation Complex. Kang T. et al., *J. Mol. Biol.*, Vol. 423, 475–481, 2012
2. Dual role of methionyl-tRNA synthetase in the regulation of translation and tumor suppressor activity of aminoacyl-tRNA synthetase-interacting multifunctional protein-3. Nam Hoon Kwon et al., *PNAS*, Vol.108(49), 19635-19640, 2011
3. Down regulation of lamin A by tumor suppressor AIMP3/p18 leads to a progeroid phenotype in mice. Young Sun Oh et al., *Ageing Cell*, Vol. 9, 810–822, 2010
4. Determination of Three-dimensional Structure and Residues of the Novel Tumor Suppressor AIMP3/p18

**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**



Manufactured for:

Immuno-Biological Laboratories, Inc. (IBL-America)  
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA

Phone: (888) 523-1246

Fax.: (763) 780-2988

Email: [info@ibl-america.com](mailto:info@ibl-america.com)

Web: [www.ibl-america.com](http://www.ibl-america.com)

# Product information

---



Required for the Interaction with ATM. Kyung-Jin Kim et al., *J Biol Chem.*, Vol. 283(20), 14032-14040, 2008

5. The haploinsufficient tumor suppressor p18 upregulates p53 via interactions with ATM/ATR. Park BJ et al., *Cell*, Vol.120:209-221, 2005

---

**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**



*Manufactured for:*

Immuno-Biological Laboratories, Inc. (IBL-America)  
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA  
Phone: (888) 523-1246 Fax.: (763) 780-2988  
Email: [info@ibl-america.com](mailto:info@ibl-america.com) Web: [www.ibl-america.com](http://www.ibl-america.com)