

## PAD6 Protein

Full length recombinant human protein expressed in Sf9 cells

**Catalog # P312-30FG**

Lot # 1267-3

### Product Description

Recombinant full-length human PAD6 was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number is [NM\\_207421](#).

### Gene Aliases

PADI6

### Formulation

Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.

### Storage and Stability

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

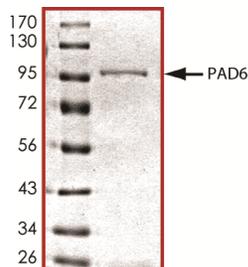
### Scientific Background

PAD6 or PADI6 is a member of the peptidylarginine deiminases which convert arginine residues to citrulline residues in the presence of calcium ions. The PAD family members are thought to be involved in multiple sclerosis and rheumatoid arthritis pathophysiology, and they play a role in epidermis homeostasis (1). PAD6 is essential for formation of a novel oocyte-restricted fibrous structure, the cytoplasmic lattices (CPLs). PAD6/CPL superstructure plays a key role in regulating microtubule-mediated organelle positioning and movement (2).

### References

1. Vossenaar, E R. Et al: PAD, a growing family of citrullinating enzymes: genes, features and involvement in disease. *Bioessays*. 2003 Nov;25(11):1106-18.
2. Kan, R. Et al: Regulation of mouse oocyte microtubule and organelle dynamics by PADI6 and the cytoplasmic lattices. *Dev Biol*. 2011 Feb 15;350(2):311-22.

### Purity



The purity of PAD6 was determined to be **>95%** by densitometry. Approx. MW **100 kDa**.

## PAD6 Protein

Full length recombinant human protein expressed in Sf9 cells

Catalog Number	P312-30FG
Specific Lot Number	1267-3
Purity	>95%
Concentration	0.1 µg/µl
Stability	1yr At -70°C from date of shipment
Storage & Shipping	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on dry ice.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: [orders@signalchem.com](mailto:orders@signalchem.com)  
[www.signalchem.com](http://www.signalchem.com)

**FOR IN VITRO RESEARCH PURPOSES ONLY. NOT INTENDED FOR USE IN HUMAN OR ANIMALS.**

# MATERIAL SAFETY DATA SHEET

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## Article 1 - Product Identification and Use

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**Product Name: PAD6 Protein**

**Catalog # P312-30FG**

*This product is sold only for research use by qualified laboratory personnel, and is not to be used as a drug, medical device, food additive, cosmetic, nor household chemical. It is not to be used in diagnostic, therapeutic, consumer, agricultural, nor pesticidal applications.*

Manufacturer's Name: SignalChem Pharmaceuticals Inc.  
Street Address: 550-5600 Parkwood Way  
City, Prov. Postal Code: Richmond, BC, V6V 2M2  
Fax: 604-232-4601  
EMERGENCY PHONE: 604-232-4600

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## Article 2 - Hazardous Ingredients

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NOT AVAILABLE. We are not aware of any hazards associated with this product or its ingredients, but the chemical, physical, and toxicological properties of this product have not been investigated thoroughly. Observe normal laboratory precautions.

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## Article 3 - Physical Data

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This product consists of purified protein in Tris-HCl buffer shipped on dry ice. The physical properties of this product have not been investigated thoroughly.

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## Article 4 - Fire and Explosion Hazard

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NOT APPLICABLE

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## Article 5 - Reactivity Data

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NOT APPLICABLE

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## Article 6 - Toxicologically Data

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May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

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## Article 7 - Preventative Measures

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Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

\*\*\*\*\*MULTIPLE COMPONENT SPILL OR LEAK PROCEDURES\*\*\*\*\*

- Wear protective equipment.
  - Absorb on sand or vermiculite and place in closed containers for disposal.
  - Observe all federal, state and local environmental regulations.
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## Article 8 - First Aid Measures

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- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
  - In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
  - If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
  - In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.
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## Article 9 - Preparation

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Prepared By: Jun Yan

Phone #: 1-866-954-6273

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. SignalChem shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

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