

Catalog # Aliquot Size

P312-30FG-20 20 μg P312-30FG-50 50 μg

## **PAD6 Protein**

Full length recombinant human protein expressed in Sf9 cells

#### Catalog # P312-30FG

Lot # Y982-3

#### **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, 50mM 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.

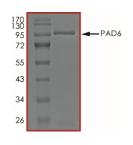
#### **Scientific Background**

PAD6 or PAD16 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

- 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.
- 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 was determined to be >95% by densitometry.
Approx. MW 100 kDa.

# **PAD6 Protein**

Full length recombinant human protein expressed in Sf9 cells

Catalog #
Lot #
Purity
Concentration
Stability
Storage & Shipping

P312-30FG Y982-3 >95% 0.1 µg/µl

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: <a href="mailto:orders@signalchem.com">orders@signalchem.com</a> <a href="mailto:www.signalchem.com">www.signalchem.com</a>

## MATERIAL SAFETY DATA SHEET

#### Article 1 - Product Identification and Use

#### 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: 110-13120 Vanier Place City, Prov. Postal Code: Richmond, BC, V6V 2J2

Fax: 604-232-4601 EMERGENCY PHONE: 604-232-4600

## **Article 2 - Hazardous Ingredients**

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.

## **Article 3 - Physical Data**

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.

## **Article 4 - Fire and Explosion Hazard**

**NOT APPLICABLE** 

## **Article 5 - Reactivity Data**

NOT APPLICABLE

## Article 6 - Toxicologically Data

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

#### **Article 7 - Preventative Measures**

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.

#### **Article 8 - First Aid Measures**

- 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.

#### **Article 9 - Preparation**

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 Catalog for additional terms and conditions of sale.