

Catalog # Aliquot Size

B11-35G-20 20 μg B11-35G-50 50 μg

## **BUB1 Protein**

Recombinant protein expressed in Sf9 cells

Catalog # B11-35G

Lot # \$108-3

## **Product Description**

Recombinant human BUB1 (756-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number is NM 004336.

#### **Gene Aliases**

BUB1A, BUB1L, hBUB1

### **Formulation**

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

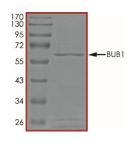
#### **Scientific Background**

BUB1 is a kinase which involved in spindle checkpoint function that in part by phosphorylating a member of the miotic checkpoint complex and activating the spindle checkpoint. BUB1 is highly expressed in thymus, ovary, and testis (1). BUB1 maintains the steady-state level and centromeric localization of SGO1, and they concluded that BUB1 protects centromeric cohesion in mitosis through SGO1 (2). BUB1-mediated phosphorylation of CDC20 is required for proper checkpoint signaling and that inhibition of APC by BUB1 may partly account for the sensitivity of the spindle checkpoint. BUB1 kinase creates a mark for shugoshin localization and the correct partitioning of chromosomes.

#### References

- Leland, S.et.al: Heterozygosity for a Bub1 mutation causes female-specific germ cell aneuploidy in mice. Proc. Nat. Acad. Sci. 106: 12776-12781, 2009.
- Tang, Z.et.al: Human Bub1 protects centromeric sisterchromatid cohesion through Shugoshin during mitosis. Proc. Nat. Acad. Sci. 101: 18012-18017, 2004.

## **Purity**



The purity of BUB1 was determined to be >80% by densitometry.

Approx. MW 63 kDa.

# **BUB1 Protein**

Recombinant protein expressed in Sf9 cells

Catalog #
Lot #
Purity
Concentration
Stability

Storage & Shipping

B11-35G \$108-3 >80% 0.1 µg/µl 1yr at -70°C from date of shipment

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centifugation 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: BUB1 Protein

### Catalog # B11-35G

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-HCI 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: Mya Zhang 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.