**Proteins** 

# Inhibitors



## **Product** Data Sheet

## **BCAP31 Protein, Human (GST)**

Cat. No.: HY-P71684

Synonyms: 6C6 AG; 6C6 AG tumor associated antigen; B-cell receptor-associated protein 31; BA31; CDM;

CDM protein; DXS1357E; MS950; p28; p28 Bap31; Protein CDM; RP23-329M9.5

Human Species: Source: E. coli

Accession: P51572 (2S-243K)

Gene ID: 10134

Molecular Weight: Approximately 54.5 kDa

### **PROPERTIES**

	_		
$\Lambda \Lambda$	500	uen	60
ᄶ	Jeu	uen	CC

SLQWTAVATF LYAEVFVVLL LCIPFISPKR WQKIFKSRLV ELLVSYGNTF FVVLIVILVL LVIDAVREIR KYDDVTEKVN LQNNPGAMEH FHMKLFRAQR NLYIAGFSLL LSFLLRRLVT SNEAFKKQAE SASEAAKKYM EENDQLKKGA LISQQATLLA AVDGGKLDVG NAEVKLEEEN RSLKADLOKL KDELASTKQK LEKAENQVLA MRKQSEGLTK EYDRLLEEHA KLQAAVDGPM

DΚ

**Appearance** 

Lyophilized powder.

Formulation

Lyophilized after extensive dialysis against solution in Tris-based buffer, 50% glycerol.

**Endotoxin Level** 

<1 EU/µg, determined by LAL method.

Reconsititution

It is not recommended to reconstitute to a concentration less than 100  $\mu g/mL$  in ddH<sub>2</sub>O.

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** 

BCAP31 functions as a chaperone protein, recognized as one of the most abundant endoplasmic reticulum (ER) proteins. Its roles span various aspects of cellular processes, including serving as a chaperone for the export of secreted proteins in the ER, aiding in the identification of abnormally folded proteins and directing them to ER-associated degradation (ERAD). Additionally, BCAP31 acts as a cargo receptor for the export of transmembrane proteins. Notably, it contributes to the assembly of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) by facilitating the translocation of NDUFS4 and NDUFB11 from the cytosol to the mitochondria through interaction with TOMM40. Under ER

stress conditions, BCAP31 undergoes delocalization from ER-mitochondria contact sites and engages in binding with BCL2. It is implicated in CASP8-mediated apoptosis and forms homodimers or heterodimers with BCAP29. BCAP31 is part of a complex involving BCAP29, BCL2, and/or BCL2L1, and it interacts with various proteins such as TOMM40, VDAC1, VAMP3, VAMP1, membrane IgD immunoglobulins, and HACD2, showcasing its multifaceted roles in cellular processes and protein-protein interactions.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com