

## CRIPT Protein, Human, Recombinant (His)

### General Information

Synonyms:	HSPC139;SSMDF;cysteine-rich PDZ-binding protein
Protein Construction:	A DNA sequence encoding the mature form of human CRIPT (Q9P021) (Met1-Val101) was expressed with a polyhistidine tag at the N-terminus. Predicted N terminal: His
Species:	Human
Expression Host:	E. coli
Accession:	Q9P021
Molecular Weight:	13.1 kDa (predicted); 17 kDa (reducing conditions)

### QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

### Preparation and Storage

#### Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

#### Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

#### Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

CRIPT, also known as cysteine-rich PDZ-binding protein, belongs to the CRIPT family. It interacts with TUBB1. CRIPT also interacts strongly with the PDZ3 domain of members of the DLG4 family. It is involved in the cytoskeletal anchoring of DLG4 in excitatory synapses. CRIPT is highly conserved from mammals to plants and binds selectively to the third PDZ domain (PDZ3) of PSD-95 via its C terminus. In heterologous cells, CRIPT causes a redistribution of PSD-95 to microtubules. In brain, CRIPT colocalizes with PSD-95 in the postsynaptic density and can be

coimmunoprecipitated with PSD-95 and tubulin. These findings suggest that CRIPT may regulate PSD-95 interaction with a tubulin-based cytoskeleton in excitatory synapses.

### Reference

- Niethammer M. et al., 1998, *Neuron*. 20 (4): 693-707.  
Passafaro M. et al., 2000, *Nat Neurosci*. 2 (12): 1063-9.  
Piserchio A. et al., 2002, *J Biol Chem*. 277 (9): 6967-73.  
Fukunaga Y. et al., 2005, *J Biochem*. 138 (2): 177-82.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286    E\_mail: info@targetmol.com    Address: 34 Washington Street, Wellesley Hills, MA 02481