

# Active Recombinant Human CAPZA1/CAPZB Protein, His-tagged

**Cat. No.** CAPZA1&CAPZB-869H    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Human CAPZA1&CAPZB(non-muscle isoform) with the alpha-1 SU untagged and beta-2 SU His-tagged was produced in HEK293 cells.
<b>Species</b>	Human
<b>Source</b>	HEK293
<b>Description</b>	The subunits of the heterodimeric capping protein CapZ possess a molecular mass of 34kDa (alpha 1-subunit) and 32kDa (beta 2-subunit, His-tagged). CapZ binds with high affinity in a Ca <sup>++</sup> -independent manner to the barbed end of actin filaments (1:1000 M/M). Ca <sup>++</sup> -insensitive barbed end capping protein. K <sub>d</sub> actin binding = >1nM (barbed end) .
<b>Form</b>	150mM NaCl, 20mM Hepes pH 7.4, 1mM DTT and 5% sucrose, when reconstituted with 1.0ml ultrapure water to obtain a 1.0 mg/ml solution.
<b>Bio-activity</b>	Capping activity: F-actin containing 20% pyrene actin was incubated with CapZ and diluted below the critical concentration. Depolymerisation was followed by fluorometry and compared to an actin reference without CapZ. Complete capping was obtained at a molar ratio of 1 : 1000 (CapZ : Actin). All proteins were used as supplied, i.e. without dialysis. G-Actin stock solutions were pre-spun 1h, 100.000xg, 4 centigrade.
<b>Molecular Mass</b>	66kDa

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Purity</b>	>94% by scanning densitometry from Coomassie G-250 stained SDS-Gels.
<b>Storage</b>	CapZ is stored at -70 centigrade upon arrival will be stable in performance for at least 6 months from the date of purchase. The solubilized protein is kept on ice and should be stored at -20 centigrade in glycerol or CryoProtect (Cat.#: 6011-01). Avoid repeated freeze / thaw cycles.
<b>Shipping</b>	At ambient temperature. Upon delivery store at -70 centigrade.

## GENE INFORMATION

<b>Gene Name</b>	CAPZA1 capping protein (actin filament) muscle Z-line, alpha 1 [ Homo sapiens ]
<b>Official Symbol</b>	CAPZA1
<b>Synonyms</b>	CAPZA1; capping protein (actin filament) muscle Z-line, alpha 1; F-actin-capping protein subunit alpha-1; Cap Z; capZ alpha-1; CAPZ; CAZ1; CAPPA1;
<b>Gene ID</b>	829
<b>mRNA Refseq</b>	NM_006135
<b>Protein Refseq</b>	NP_006126
<b>MIM</b>	601580
<b>UniProt ID</b>	P52907

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA