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California Bioscience

Product Datasheet

Product Name	Heat Shock Factor Binding Protein - 1 Human Recombinant
Cata No	CB500751
Source	*Escherichia Coli.*
Synonyms	NPC-A-13, HSBP1, Heat shock factor-binding protein 1, Nasopharyngeal carcinoma-associated antigen 13, HSF1BP, DKFZp686D1664, DKFZp686O24200.

Description

The heat-shock response is elicited by exposure of cells to thermal and chemical stress and through the activation of HSFs (heat shock factors) results in the elevated expression of heat-shock induced genes. Heat shock factor binding protein-1 (HSBP1), is a 76-amino-acid protein that binds to heat shock factor 1(HSF1), which is a transcription factor involved in the HS response. During HS response, HSF1 undergoes conformational transition from an inert non-DNA-binding monomer to active functional trimers. HSBP1 is nuclear-localized and interacts with the active trimeric state of HSF1 to negatively regulate HSF1 DNA-binding activity.
Overexpression of HSBP1 in mammalian cells represses the transactivation activity of HSF1. When overexpressed in C.elegans HSBP1 has severe effects on survival of the animals after thermal and chemical stress consistent with a role of HSBP1 as a negative regulator of heat shock response.
Recombinant Human HSBP1 produced in E.Coli is a single,non-glycosylated polypeptide chain containing 76 amino acids and having a molecular mass of 8.5 kDa.

Physical Appearance

Sterile filtered colorless solution.

Purity

Greater than 95.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Formulation

The HSBP1 protein (1mg/ml) solution contains 20mM Tris-HCl buffer pH-7.5, 50mM NaCl, 1mM EDTA and 20% Glycerol.

Stability

Store at 4℃ if entire vial will be used within 2-4 weeks.
Store, frozen at -20℃ for longer periods of time.
For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).
Avoid multiple freeze-thaw cycles.

Sequence

MAETDPKTVQ DLTSVVQTLL QQMQDKFQTM SDQIIGRIDD MSSRIDDLEK NIADLMTQAG VEELESENKI PATQKS.

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