

Product Data Sheet

□ Cat # RP-610

Recombinant Human Heat Shock Factor Binding Protein- 1

Size: □ 2 ug

□ 10 ug

**Synonyms:**

NPC-A-13, HSBP1.

**Introduction:**

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.

**Description:**

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.

**Source:**

*Escherichia Coli*.

**Physical Appearance:**

Sterile filtered colorless solution.

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

**Purity:**

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

**Sequence:**

MAETDPKTVQ DLTSVVQTL QMQDKFQTM SDQIIGRIDD MSSRIDLEK NIADLMTQAG VEELESENKI PATQKS

**Usage:**

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals. If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage..Rev.

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