

## Product datasheet for AP06640PU-M

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**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

### **HBP1 Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

Applications: IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunohistochemistry on paraffin sections: 1/50-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids 441-490 of Human HBP1.

**Specificity:** This antibody detects endogenous levels of HBP1 protein.

(region surrounding Leu468)

**Formulation:** Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified lg fraction Preservative: 15 mM sodium azide

**Concentration:** 1.0 mg/ml

**Purification:** Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-

PAGE)

Conjugation: Unconjugated

**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

Predicted Protein Size: ~ 50 kDa

Gene Name: HMG-box transcription factor 1

Database Link: Entrez Gene 26959 Human

O60381





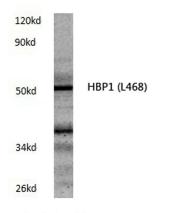
### Background:

The HMG-box protein-1 (HBP1) is a member of the HMG family of transcription factors, which are characterized by the presence of a conserved protein motif, the high mobility group (HMG) 1 box, that mediates DNA binding. HBP1 binds to the tumor suppressor proteins Rb and p130 and initiates cell cycle arrest. Terminal cell differentiation requires this initial cell cycle arrest followed by the coordinated expression of genes defined as tissue-specifc markers. Along with initiating the commitment to cell differentiation, the continued activity of HBP1 abrogates the expression of tissue-specific genes by associating with the MyoD proteins. In muscle cell differentiation, the MyoD family of transcription factors, which include Myf5, MyoD and myogenein, induce the expression of these cell-type specific proteins and contribute to the development of cell phenotypes. The progression of terminal differentiation is, therefore, dependent on both a decrease in HBP1 activity and the corresponding activation of MyoD-induced gene transcription.

Synonyms:

HMG box-containing protein 1, HMG box transcription factor 1

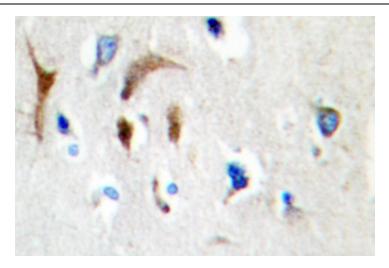
# **Product images:**



Western blot (WB) analysis of HBP1 antibody in extracts from hela cells.

Hela whole cell lysate HBP1 (L468) pAb at 1:500 dilution





Immunohistochemistry (IHC) analyzes of HBP1 antibody in paraffin-embedded human brain tissue.