

Product datasheet for TP727330

OriGene Technologies, Inc.

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HOXB4 Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant Human Homeobox Protein Hox-B4/HOXB4/HOX-2F (N-6His)

Species: Human

Expression cDNA Clone

or AA Sequence:

Met1-Leu251

Tag: N-His

Buffer: Supplied as a 0.2 um filtered solution of 4mM HCl.

Note: Recombinant Human Homeobox protein B4 is produced by our E.coli expression system and

the target gene encoding Met1-Leu251 (Leu175Asp,Glu176Lys,Glu178Lys) is expressed with a

6His tag at the N-terminus.

Storage: Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.

Stability: 12 months from date of despatch

Locus ID: 3214 **UniProt ID:** P17483

Synonyms: Homeobox protein Hox-B4; Homeobox protein Hox-2.6; Homeobox protein Hox-2F; HOXB4;

HOX2F

Summary: Homeobox B4 (HOXB4) is encoded by the HOXB4 gene which is a member of the the class I

homeobox (HOX) gene family and encodes a nuclear protein with a homeobox DNA-binding domain. These genes are master control regulators of developmental programs including embryonic and adult hematopoiesis. Multiple HOX genes, including HOXB4, are highly expressed in the hematopoietic stem cells (HSC) compartment. HOXB4 gene can act in opposite ways when expressed by different cells, promoting the proliferation of stem cells whilst activating the apoptotic pathway in some embryonic structures. The protein HOXB4, as a homeodomain transcription factor, has been shown to be an important regulator of stem

cell renewal and hematopoiesis. Incellular or ectopic expression of HOXB4 expands

hematopoietic stem and progenitor cells in vivo and in vitro, making it a potential candidate

for therapeutic stem cell expansion.

Protein Families: ES Cell Differentiation/IPS, Stem cell relevant signaling - DSL/Notch pathway, Transcription

Factors

