

## 32-8598: Recombinant Human Homeobox Protein Hox-B4/HOXB4/HOX-2F (N-6His)

**Gene :** HOXB4  
**Gene ID :** 3214  
**Uniprot ID :** P17483

### Description

Source: E.coli.  
MW :29.8kD.

Recombinant Human Homeobox protein B4 is produced by our E.coli expression system and the target gene encoding Met1-Leu251 is expressed with a 6His tag at the N-terminus. 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.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of 4mM HCl.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHHSSGLVPRGSHMAMSSFLINSNYVDPKFPPCEEYSQSDYLPSDHSPGYAGGQRRESSFQPEA  
GFGRRAACTVQRYAACRDPGPPPPPPPPPPPPPPGLSPRAPAPPAGALLPEPGQRCEAVSSSPPPPPCAQNPL  
HPSPSHSACKPEVVYPWMRKVHVSTVNPNYAGGEPKRSRTAYTRQQVDKLLKEFHYNRYLTRRRRVEIAHALC  
LSERQIKIWFQNRMRKWKDHLKLPNTKIRSGGAAGSAGGPPGRPNGGPRAL

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.