

Product Name: KD-Validated Homeobox B4 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA01786

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 27.6kDa

Antigen Information

Gene Name	HOXB4
Alternative Names	HOXB4; Homeobox B4; HOX2F; Homeobox Protein Hox-2.6; Homeobox Protein Hox-B4; Homeobox Protein Hox-2F; Homeo Box B4; HOX2; Homeo Box 2F; HOX-2.6
Gene ID	3214.0
SwissProt ID	P17483
Immunogen	A synthesized peptide derived from human HOXB4

Background

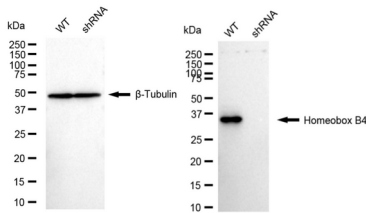
This gene is a member of the Antp homeobox family and encodes a nuclear protein with a homeobox DNA-binding domain. It is included in a cluster of homeobox B genes located on chromosome 17. The encoded protein functions as a sequence-specific transcription factor that is involved in development. Intracellular or ectopic expression of this protein expands hematopoietic

stem and progenitor cells in vivo and in vitro, making it a potential candidate for therapeutic stem cell expansion. [provided by RefSeq, Jul 2008]

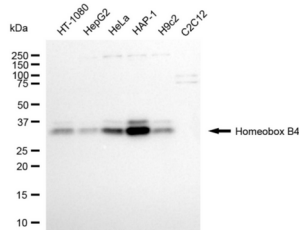
Research Area

Epigenetics and Nuclear Signaling

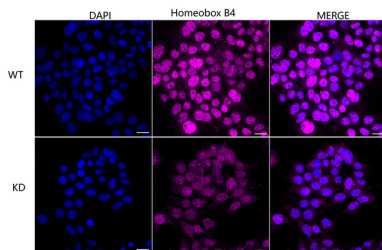
Image Data



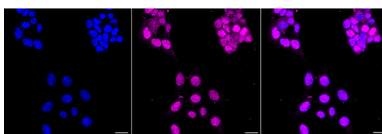
Western blotting analysis using homeobox B4 antibody (KVAb01786). Homeobox B4 expression in wild type (WT) and homeobox B4 (HOXB4) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with homeobox B4 antibody (KVAb01786, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



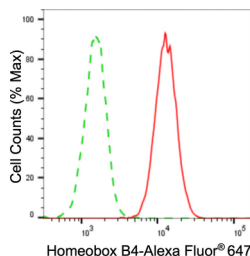
Western blotting analysis using homeobox B4 antibody (KVAb01786). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with homeobox B4 antibody (KVAb01786, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells using Homeobox B4 antibody (KVAb01786, 1:1,000). Top panel: wild-type (WT); Bottom panel: Homeobox B4 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Homeobox B4 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Immunocytochemical staining of HAP-1 cells with Homeobox B4 antibody (KVAb01786, 1:1,000). Nuclei were stained blue with DAPI; Homeobox B4 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of homeobox B4 expression in HAP-1 cells using homeobox B4 antibody (KVAb01786, 1:2,000). Green, isotype control; red, homeobox B4.