
Product Name: KD-Validated RUNX1/RUNX2/RUNX3 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01179**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,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	Predicted, 49 kDa, observed, 51 kDa

Antigen Information

Gene Name	RUNX1/RUNX2/RUNX3
Alternative Names	RUNX1; RUNX Family Transcription Factor 1; Runt-Related Transcription Factor 1; AMLCR1; CBFA2; AML1; Polyomavirus Enhancer-Binding Protein 2 Alpha B Subunit; SL3/AKV Core-Binding Factor Alpha B Subunit; SL3-3 Enhancer Factor 1 Alpha B Subunit; Runt Related Transcription Factor 1; Acute Myeloid Leukemia 1 Protein; Oncogene AML-1; PEBP2-Alpha B; PEA2-Alpha B; PEBP2A2; Core-Binding Factor, Runt Domain, Alpha Subunit; Core-Binding Factor Subunit Alpha-2; AML1-EVI-1 Fusion Protein; Acute Myeloid Leukemia 1; AML1-ETO Fusion Protein; AML1-ETO Fusion; Aml1 Oncogene; Mutant RUNX1; CBF-Alpha-2; AML1-EVI-1; PEBP2alpha; CBF2alpha; PEBP2aB; EVI-1
Gene ID	861,864,860

SwissProt ID Q01196,Q13761,Q13950

Immunogen A synthesized peptide derived from human RUNX1/RUNX2/RUNX3

Background

RUNX1: Core binding factor (CBF) is a heterodimeric transcription factor that binds to the core element of many enhancers and promoters. The protein encoded by this gene represents the alpha subunit of CBF and is thought to be involved in the development of normal hematopoiesis. Chromosomal translocations involving this gene are well-documented and have been associated with several types of leukemia. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

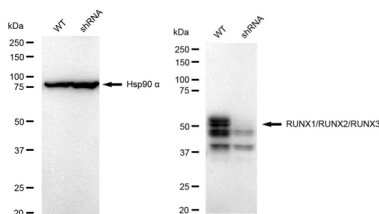
RUNX3: This gene encodes a member of the runt domain-containing family of transcription factors. A heterodimer of this protein and a beta subunit forms a complex that binds to the core DNA sequence 5'-PYGPYGGT-3' found in a number of enhancers and promoters, and can either activate or suppress transcription. It also interacts with other transcription factors. It functions as a tumor suppressor, and the gene is frequently deleted or transcriptionally silenced in cancer. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2016]

RUNX2: This gene is a member of the RUNX family of transcription factors and encodes a nuclear protein with an Runt DNA-binding domain. This protein is essential for osteoblastic differentiation and skeletal morphogenesis and acts as a scaffold for nucleic acids and regulatory factors involved in skeletal gene expression. The protein can bind DNA both as a monomer or, with more affinity, as a subunit of a heterodimeric complex. Two regions of potential trinucleotide repeat expansions are present in the N-terminal region of the encoded protein, and these and other mutations in this gene have been associated with the bone development disorder cleidocranial dysplasia (CCD). Transcript variants that encode different protein isoforms result from the use of alternate promoters as well as alternate splicing. [provided by RefSeq, Jul 2016]

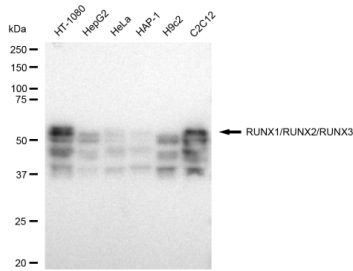
Research Area

Epigenetics and Nuclear Signaling, Stem Cells, Cancer, Developmental Biology, Neuroscience

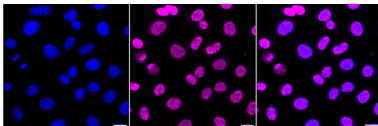
Image Data



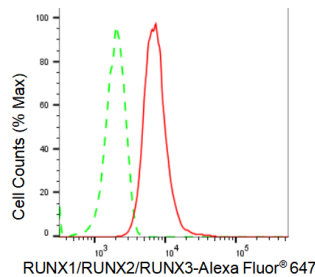
Western blotting analysis using RUNX1/RUNX2/RUNX3 antibody (KVA01179). RUNX1/RUNX2/RUNX3 expression in wild type (WT) and RUNX1/RUNX2/RUNX3 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with RUNX1/RUNX2/RUNX3 antibody (KVA01179, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using RUNX1/RUNX2/RUNX3 antibody (KVA01179). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with RUNX1/RUNX2/RUNX3 antibody (KVA01179, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HT-1080 cells with RUNX1/RUNX2/RUNX3 antibody (KVA01179, 1:1,000). Nuclei were stained blue with DAPI; RUNX1/RUNX2/RUNX3 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 RUNX1/RUNX2/RUNX3 expression in HT-1080 cells using RUNX1/RUNX2/RUNX3 antibody (KVA01179, 1:2,000). Green, isotype control; red, RUNX1/RUNX2/RUNX3.