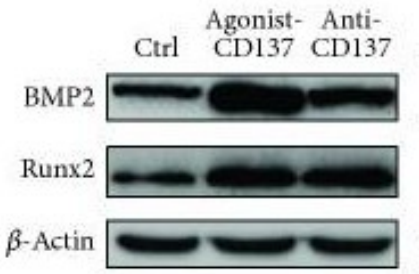
RUNX2 Polyclonal Antibody

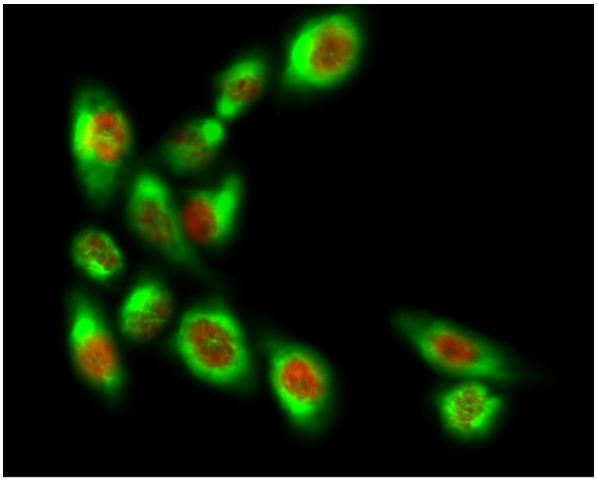
Catalog No	YP-Ab-02241
Isotype	IgG
Reactivity	Human;Mouse;Rat;Dog
Applications	IF;WB;ELISA
Gene Name	RUNX2
Protein Name	Runt-related transcription factor 2
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human RUNX2. AA range:201-250
Specificity	RUNX2 Polyclonal Antibody detects endogenous levels of RUNX2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IF: 1:50-200 Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	RUNX2; AML3; CBFA1; OSF2; PEBP2A; Runt-related transcription factor 2; Acute myeloid leukemia 3 protein; Core-binding factor subunit alpha-1; CBF-alpha-1; Oncogene AML-3Osteoblast-specific transcription factor 2; OSF-2; Polyomavirus enhancer-binding protein 2 alpha A subunit; PEA2-alpha A; PEBP2-alpha A; SL3-3 enhancer factor 1 alpha A subunit; SL3/AKV core-binding factor alpha A subunit
Observed Band	56kD
Cell Pathway	Nucleus .
Tissue Specificity	Specifically expressed in osteoblasts.
Function	disease:Defects in RUNX2 are the cause of cleidocranial dysplasia (CCD) [MIM:119600]. CCD is an autosomal dominant skeletal disorder with high penetrance and variable expressivity. It is due to defective endochondral and intramembranous bone formation. Typical features include hypoplasia/aplasia of clavicles, patent fontanelles, wormian bones (additional cranial plates caused by abnormal ossification of the calvaria), supernumerary teeth, short stature, and other skeletal changes. In some cases defects in RUNX2 are exclusively associated with dental anomalies.,domain:A proline/serine/threonine rich region

	at the C-terminus is necessary for transcriptional activation of target genes and contains the phosphorylation sites.,function:Transcription factor involved in osteoblastic differentiation and skeletal morphogenesis. Essential for the maturation of osteoblasts and both intramembranous a
Background	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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

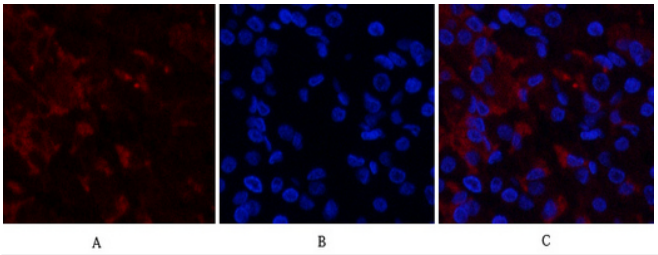
Products Images



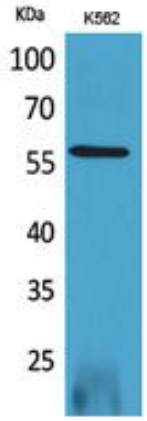
Chen, Rui, et al. "Activation of CD137 Signaling Enhances Vascular Calcification through c-Jun N-Terminal Kinase-Dependent Disruption of Autophagic Flux." Mediators of inflammation 2018 (2018).



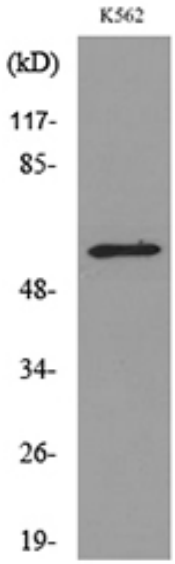
Immunofluorescence analysis of Hela cell. 1,RUNX2 Polyclonal Antibody(red) was diluted at 1:200(4° overnight). NSE Monoclonal Antibody(13E2)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000(room temperature, 50min).



Immunofluorescence analysis of human-stomach tissue. 1,RUNX2 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Western Blot analysis of K562 cells using RUNX2 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of lysate from K562 cells, using RUNX2 Antibody.