




Rabbit Anti-RUNX2 antibody

SL1134R

Product Name:	RUNX2
Chinese Name:	核心结合因子 α 1/成骨特异性转录因子/Cbfa1抗体
Alias:	RUNX2_HUMAN; Runt-related Transcription Factor 2; CBF alpha 1; CBF-alpha-1; PEBP2-alpha A; CBFA1; CCD; CCD1; Cleidocranial dysplasia 1; Core binding factor; Core binding factor runt domain alpha subunit 1; Core binding factor subunit alpha 1; MGC120023; Oncogene AML 3; OSF 2; OSF2; OSF-2; Osteoblast specific transcription factor 2; OTTHUMP00000016533; PEA2 alpha A; PEA2aA; PEBP2 alpha A; PEBP2A1; PEBP2A2; PEBP2aA1; Polyomavirus enhancer binding protein 2 alpha A subunit; Runt domain; Runt related transcription factor 2; SL3 3 enhancer factor 1 alpha A subunit; SL3/AKV core binding factor alpha A subunit; AML3; CLCD.
文献引用 	<p>Specific References(3) SL1134R has been referenced in 3 publications.</p> <p>[IF=3.68]Zhang, Ping, et al. "Contribution of SATB2 to the stronger osteogenic potential of bone marrow stromal cells from craniofacial bones." Cell and Tissue Research 350.3 (2012): 425-437.WB;Rat. PubMed:22237862</p> <p>[IF=1.20]Hu, Fei, et al. "High expression of periostin is dramatically associated with metastatic potential and poor prognosis of patients with osteosarcoma." World Journal of Surgical Oncology 12.1 (2014): 287.IHC-P;Human. PubMed:25224568</p> <p>[IF=1.56]Li, Pengcui, et al. "Blockade of hypoxia-induced CXCR4 with AMD3100 inhibits production of OA-associated catabolic mediators IL-1β and MMP-13." Molecular Medicine Reports.WB;Human. PubMed:27356492</p>
Organism Species:	Rabbit

Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	57(hu)/67(mo, rat) kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human RUNX2:202-300/521
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>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. 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 2008].</p> <p>Function: Transcription factor involved in osteoblastic differentiation and skeletal morphogenesis. Essential for the maturation of osteoblasts and both intramembranous and endochondral ossification. CBF binds to the core site, 5'-PYGPGGT-3', of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, osteocalcin, osteopontin, bone sialoprotein, alpha 1(I) collagen, LCK, IL-3 and GM-CSF promoters (By similarity). Inhibits MYST4-dependent transcriptional activation. [SUBUNIT] Interaction with SATB2 results in enhanced DNA binding and transactivation by these transcription factors (By similarity). Heterodimer of an alpha and a beta subunit. Interacts with HIVP3 (By similarity). The alpha subunit binds DNA as a monomer and through the Runt domain. DNA-binding is increased by heterodimerization. Interacts with XRCC6 (Ku70) and XRCC5 (Ku80). Interacts with MYST3 and MYST4.</p> <p>Subunit: Heterodimer of an alpha and a beta subunit. Interacts with HIVP3. The alpha subunit binds DNA as a monomer and through the Runt domain. DNA-binding is increased by</p>

heterodimerization. Interacts with G22P1 (Ku70) and XRCC5 (Ku80). Interacts with MYST3 and MYST4.

Subcellular Location:

Nucleus.

Tissue Specificity:

Specifically expressed in osteoblasts.

Post-translational modifications:

Phosphorylated; probably by MAP kinases (MAPK). Isoform 3 is phosphorylated on Ser340.

DISEASE:

Defects in RUNX2 are the cause of cleidocranial dysplasia (CLCD) [MIM:119600]; also known as cleidocranial dysostosis (CCD). CLCD 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.

Similarity:

Contains 1 Runt domain.

SWISS:

Q13950

Gene ID:

860

Database links:

[Entrez Gene: 860](#)Human

[Entrez Gene: 12393](#)Mouse

[Entrez Gene: 100155806](#)Pig

[Entrez Gene: 367218](#)Rat

[Oimim: 600211](#)Human

[SwissProt: Q13950](#)Human

[SwissProt: Q9XSB7](#)Horse

[SwissProt: Q08775](#)Mouse

[SwissProt: Q9Z2J9](#)Rat

[Unigene: 535845](#)Human

[Unigene: 391013](#)Mouse

[Unigene: 391017](#)Mouse

[Unigene: 214214](#)Rat

[Unigene: 83672](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

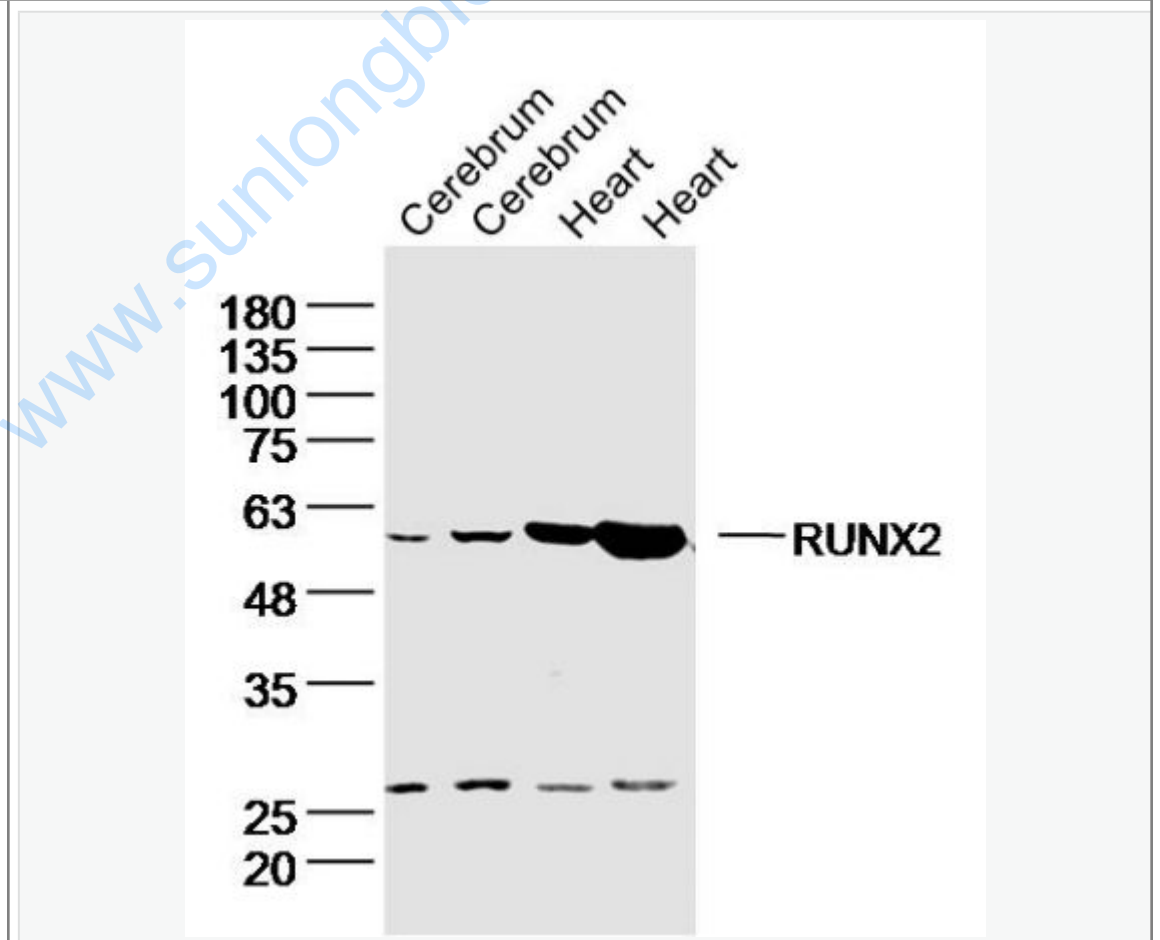
RUNX2又称: Cbfa1(Core-binding factor, alpha 3 subunit)

是新发现的一类调控间充质Stem

cells向成骨方向分化的特异性转录因子,参与骨形成,骨骼生长和发育的一类重要细胞,它起源于多能间充质Stem cells,是间充质Stem

cells在体内的各种调控因素的调节下发育而成的。

Picture:



Sample:

Cerebrum (mouse) Lysate at 40 ug

Cerebrum (Rat) Lysate at 40 ug

Heart (mouse) Lysate at 40 ug

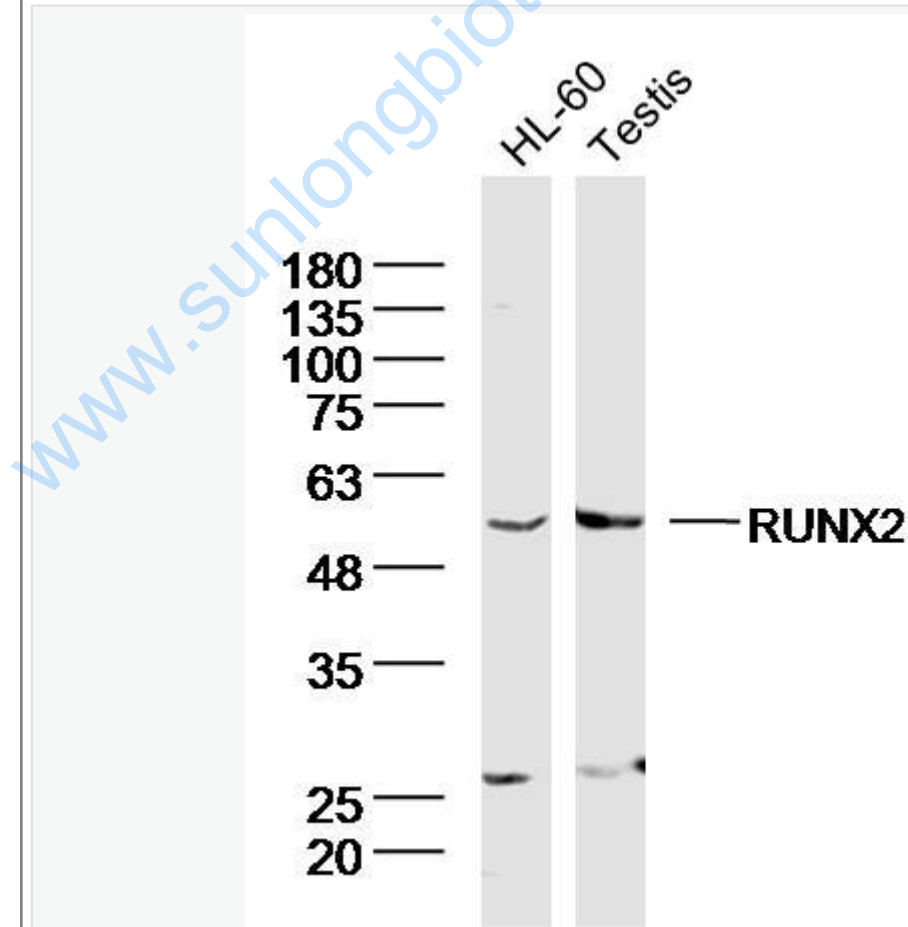
Heart (Rat) Lysate at 40 ug

Primary: Anti- RUNX2 (SL1134R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 57/67 kD

Observed band size: 57 kD



Sample:

HL-60(human)Cell Lysate at 40 ug

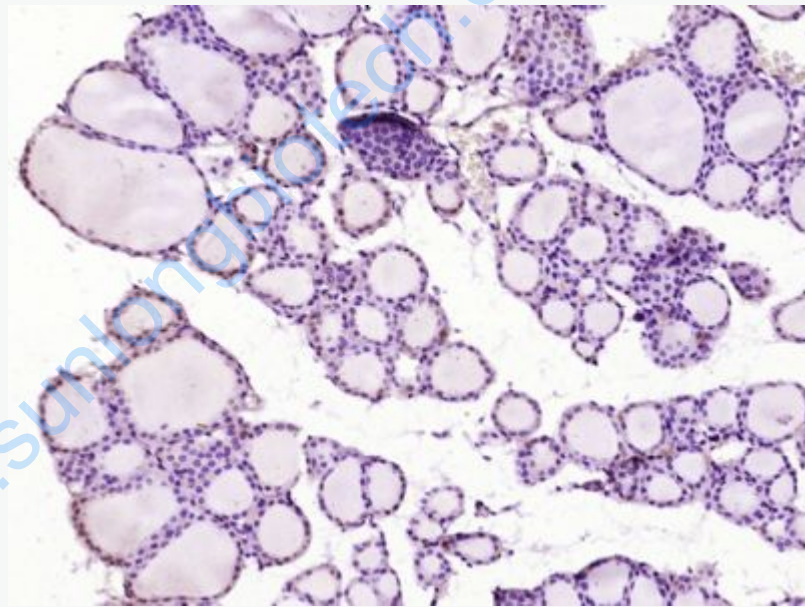
Testis (mouse)l Lysate at 40 ug

Primary: Anti- RUNX2 (SL1134R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

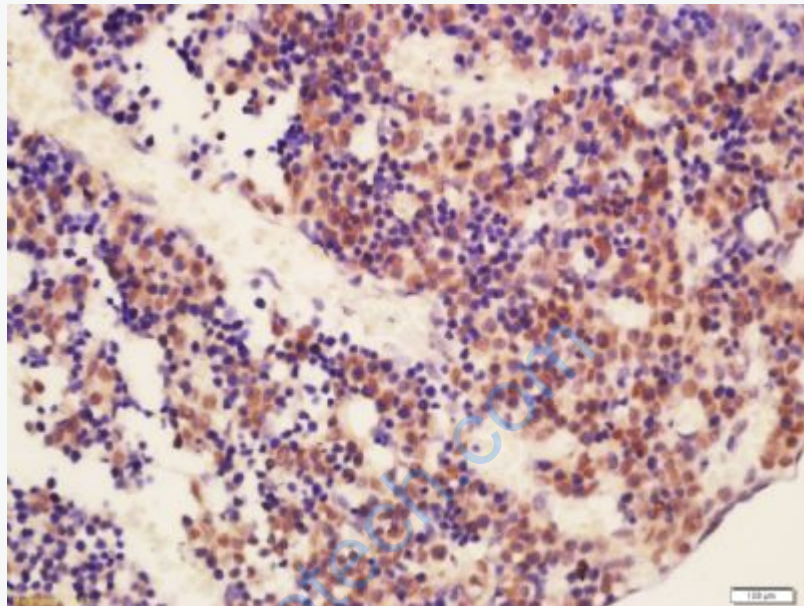
Predicted band size: 57/67 kD

Observed band size: 57 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse esophagus); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (RUNX2) Polyclonal Antibody, Unconjugated (SL1134R) at 1:400 overnight at 4°C, followed by operating

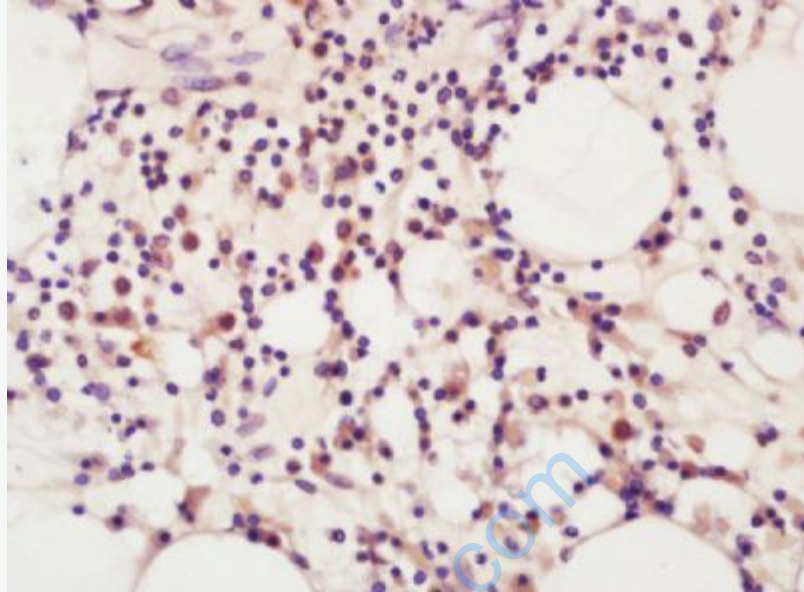
according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: Mouse embryo tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Sialoadhesin Polyclonal Antibody, Unconjugated(SL1134R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human whirlbone; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block
endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer
(normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-RUNX2 Polyclonal Antibody, Unconjugated(SL1134R) 1:200,
overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and
DAB(C-0010) staining