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RUNX3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14667c

Specification

RUNX3 Antibody (Center) - Product Information

Application	**IF, WB, IHC-P,E**
Primary Accession	Q13761
Other Accession	NP_001026850.1, NP_004341.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Antigen Region	**168-197**

RUNX3 Antibody (Center) - Additional Information

Gene ID 864

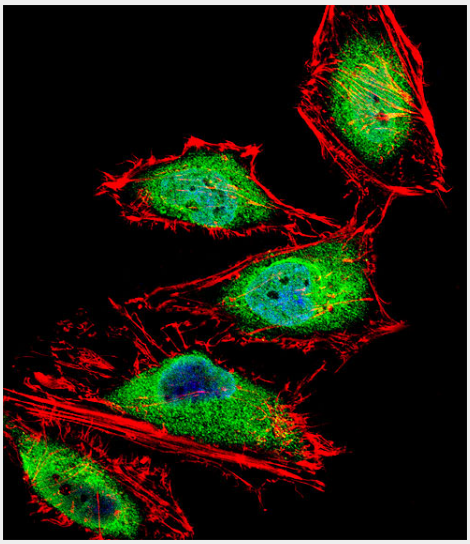
Other Names
Runt-related transcription factor 3, Acute myeloid leukemia 2 protein, Core-binding factor subunit alpha-3, CBF-alpha-3, Oncogene AML-2, Polyomavirus enhancer-binding protein 2 alpha C subunit, PEA2-alpha C, PEBP2-alpha C, SL3-3 enhancer factor 1 alpha C subunit, SL3/AKV core-binding factor alpha C subunit, RUNX3, AML2, CBFA3, PEBP2A3

Target/Specificity
This RUNX3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 168-197 amino acids from the Central region of human RUNX3.

Dilution
IF~~1:10~50
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage



Fluorescent confocal image of Hela cell stained with RUNX3 Antibody (Center)(Cat#AP14667c).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with RUNX3 primary antibody (1:25, 1 h at 37℃). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37℃).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37℃). Nuclei were counterstained with DAPI (blue) (10 µg/ml, 10 min). RUNX3 immunoreactivity is localized to Nucleus and Cytoplasm significantly.

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Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
RUNX3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

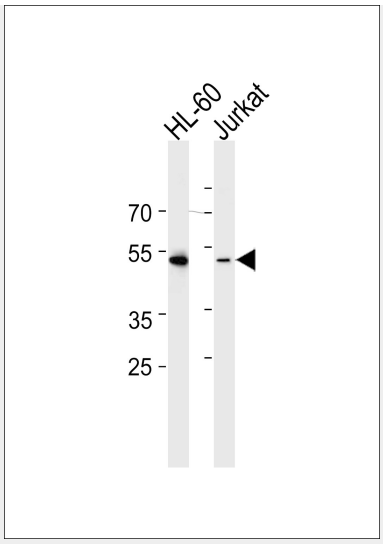
RUNX3 Antibody (Center) - Protein Information

Name RUNX3

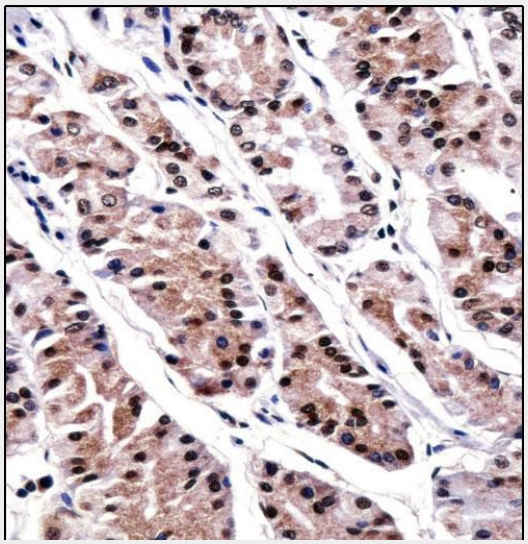
Synonyms AML2, CBFA3, PEBP2A3

Function
Forms the heterodimeric complex core-binding factor (CBF) with CBFB. RUNX members modulate the transcription of their target genes through recognizing the core consensus binding sequence 5'-TGTGGT-3', or very rarely, 5'-TGCGGT-3', within their regulatory regions via their runt domain, while CBFB is a non-DNA-binding regulatory subunit that allosterically enhances the sequence-specific DNA-binding capacity of RUNX. The heterodimers bind to the core site of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, LCK, IL3 and GM-CSF promoters (By similarity). May be involved in the control of cellular proliferation and/or differentiation. In association with ZFHX3, upregulates CDKN1A promoter activity following TGF-beta stimulation (PubMed:20599712). CBF complexes repress ZBTB7B transcription factor during cytotoxic (CD8+) T cell development. They bind to RUNX-binding sequence within the ZBTB7B locus acting as transcriptional silencer and allowing for cytotoxic T cell differentiation. CBF complexes binding to the transcriptional silencer is essential for recruitment of nuclear protein complexes that catalyze epigenetic modifications to establish epigenetic ZBTB7B silencing (By similarity).

Cellular Location
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00399,



Western blot analysis of lysates from HL-60, Jurkat cell line (from left to right), using RUNX3 Antibody (Center) (Cat. #AP14667c). AP14667c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



RUNX3 Antibody (Center) (AP14667c)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of RUNX3 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

RUNX3 Antibody (Center) - Background

This gene encodes a member of the runt

ECO:0000269|PubMed:20100835, ECO:0000269|PubMed:20599712}. Cytoplasm. Note=The tyrosine phosphorylated form localizes to the cytoplasm. Translocates from the cytoplasm to the nucleus following TGF-beta stimulation

Tissue Location
Expressed in gastric cancer tissues (at protein level).

RUNX3 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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. Multiple transcript variants encoding different
isoforms have been found for this gene.

RUNX3 Antibody (Center) - References

Tsang, Y.H., et al. Oncogene 29(41):5643-5650(2010)
Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)
Iwatani, K., et al. Biochem. Biophys. Res. Commun. 400(3):426-431(2010)
Kodach, L.L., et al. Carcinogenesis 31(9):1567-1575(2010)
Nishio, M., et al. Anticancer Res. 30(7):2673-2682(2010)

RUNX3 Antibody (Center) - Citations

- Pim-1 acts as an oncogene in human salivary gland adenoid cystic carcinoma.