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Anti-RUNX3 Antibody

Catalog # AP59501

Product Information

Application	WB, IF/IC
Primary Accession	Q13761
Reactivity	Human, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44356

Additional Information

Gene ID	864
Other Names	AML2; CBFA3; PEBP2A3; 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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RUNX3. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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, up- regulates 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). Necessary for the development and survival of sensory neurons expressing parvalbumin (By similarity).

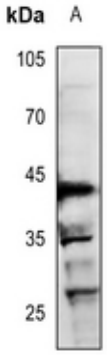
Cellular Location

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

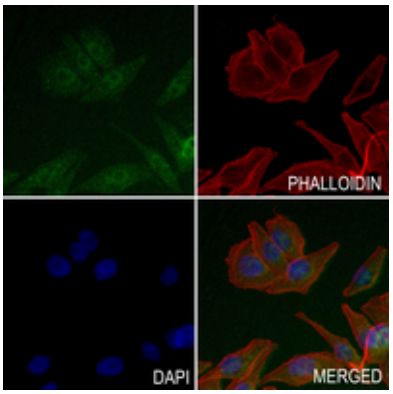
Tissue Location

Expressed in gastric cancer tissues (at protein level).

Images



Western blot analysis of RUNX3 expression in EC9706 (A) whole cell lysates. (Predicted band size: 44 kD; Observed band size: 44 kD)



Immunofluorescent analysis of RUNX3 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.