Medaysis
Enable Innovation

DATA SHEET

Mouse Anti-RUNX2 [MD438]: MC0688

Intended Use: For Research Use Only

Description: The mammalian RUNX family consists of three members: RUNX1, RUNX2 and RUNX3. Members of the RUNX family are DNA-binding proteins that regulate the expression of genes involved in cell differentiation and cell cycle progression. RUNX2 (Runt-related transcription factor 2) is involved in skeletal mineralization by stimulating osteoblast differentiation of mesenchymal stem cells, promoting chondrocyte hypertrophy, and contributing to endothelial cell migration and vascular invasion in developing bones. Mutations in the corresponding RUNX2 gene have been associated with the bone development disorder cleidocranial dysplasia (CCD). RUNX2 is also abnormally expressed in various human cancers, including prostate and breast cancer. It plays an important role in migration, invasion, and bone metastasis of prostate and breast cancer cells

Specifications

Clone:	MD438
Source:	Mouse
Isotype:	IgG1
Reactivity:	Human, mouse, rat
Immunogen:	Fragment of mouse-derived RUNX2 aa 294-363
Localization:	Nucleus
Formulation:	Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
Storage:	Store at 2°- 8°C
Applications:	IHC, WB

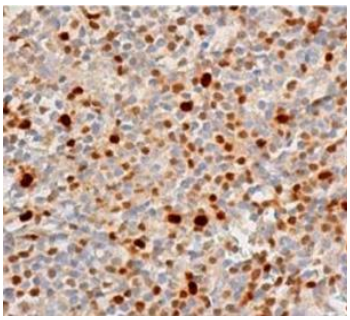
Package:

Description	Catalog No.	Size
RUNX2 [MD438] Concentrated	MC0688	1 ml

IHC Procedure*

Positive Control Tissue:	Tonsil, lymph node, spleen, osteosarcoma
Concentrated Dilution:	25-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human lymph node stained with anti-RUNX2 using DAB

References:

1. Lysine methyltransferase SET and MYND domain containing 2 (Smyd2) and Enhancer of Zeste 2 (Ezh2) jointly regulate osteoblast proliferation and mineralization. Dashti, P. et al. Gene. 146928, 2023 Jan 30:851:146928. doi: 10.1016/j.
2. Exposure of iron oxide nanoparticles (IOs) to a magnetic field promotes the expression of bone formation markers in osteoblasts through the activation of integrin α-3 (INTa-3), inhibits osteoclast activity, and exerts an anti-inflammatory effect. K Marycz, et al. J Nanobiotechnology. Feb 18;18(1):33, 2020. doi: 10.1186/s12951-020-00590-w.
3. Characterization of the interaction between the intracellular domain of CD44 and RUNX2 in PC3 human prostate cancer cells. Linda T Senbanjo, et al. Cell Commun. Signal. 17: 80, 2019. doi: 10.1186/s12964-019-0395-6.

Orders: customercare@medaysis.com Support: techsupport@medaysis.com Tel: 510-509-3153 www.medaysis.com

© Medaysis Company