

Mouse Anti-ROR2/NTRKR2 [MD410]: MC0676, MC0676RTU7

Intended Use: For Research Use Only

Description: ROR1 and ROR2 are orphan receptor tyrosine kinases that are most closely related to MuSK and the Trk family of neurotrophin receptors. ROR2 (receptor tyrosine kinase-like orphan receptor 2), also known as neurotrophic tyrosine kinase receptor-related 2 (NTRKR2), is a single pass transmembrane tyrosine-protein kinase receptor that plays a crucial role in skeletal and endocrine development. ROR2 is primarily located in the cell membrane, where extracellular immunoglobulin-like domain, cysteine-rich domain, and kringle domain facilitate interactions with various ligands and signaling molecules. It promotes the differentiation of osteoblasts and plays an important role in the early formation of chondrocytes. ROR2 sequesters and associates with Dlx-1 affecting the transcriptional function of Msx-2. ROR2 also interacts with canonical Wnt-1 and Wnt-3, regulating their signaling pathways. Defects in ROR2 can result in the autosomal dominant skeletal disorder, brachydactyly type B1, or the autosomal recessive skeletal disorder, Robinow syndrome.

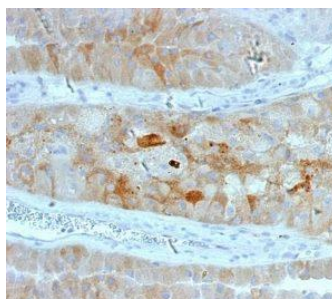
Specifications

Clone:	MD410
Source:	Mouse
Isotype:	IgG
Reactivity:	Human
Immunogen:	Human cultured keratinocytes
Localization:	Cytoplasm, membrane
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC
Package:	

Description	Catalog No.	Size
ROR2/NTRKR2 Concentrated	MC0676	1 ml
ROR2/NTRKR2 Prediluted	MC0676RTU7	7 ml

IHC Procedure

Positive Control:	Breast, kidney, GIST, pancreas
Concentrated Dilution:	50-200
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 kidney stained with anti-ROR2 using DAB

References:

1. The Ror-Family Receptors in Development, Tissue Regeneration and Age-Related Disease. Mitsuharu Endo, et al. Front. Cell Dev. Biol., 12 April 2022.
2. New insights into the molecular mechanisms of ROR1, ROR2, and PTK7 signaling from the proteomics and pharmacological modulation of ROR1 interactome. Juuli Raivola, et al. Cell Mol Life Sci. 2022 May 4;79(5):276, 2022.
3. ROR1 and ROR2 play distinct and opposing roles in endometrial cancer. C E Henry, et al. Gynecol Oncol. Mar; 148(3):576-584, 2018.

Doc. 100-MC0676
Rev. B