



# Anti-TMEM64 polyclonal antibody (DPABW1101)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Immunogen</b>	Recombinant human Transmembrane protein 64 protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Mouse
<b>Purification</b>	Protein G purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA, WB, IHC
<b>Format</b>	Liquid
<b>Size</b>	100 µg
<b>Buffer</b>	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
<b>Preservative</b>	None
<b>Storage</b>	Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze.

## BACKGROUND

<b>Introduction</b>	Positively regulates TNFSF11-induced osteoclast differentiation. Acts as a regulator of TNFSF11-mediated Ca(2+) signaling pathways via its interaction with SERCA2 which is critical for the TNFSF11-induced CREB1 activation and mitochondrial ROS generation necessary for
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proper osteoclast generation. Association between TMEM64 and SERCA2 in the ER leads to cytosolic Ca (2+) spiking for activation of NFATC1 and production of mitochondrial ROS, thereby triggering Ca (2+) signaling cascades that promote osteoclast differentiation and activation. Negatively regulates osteoblast differentiation and positively regulates adipocyte differentiation via modulation of the canonical Wnt signaling pathway. Mediates the switch in lineage commitment to osteogenesis rather than to adipogenesis in mesenchymal stem cells by negatively regulating the expression, activity and nuclear localization of CTNNB1.

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## GENE INFORMATION

Entrez Gene ID	<a href="#">169200</a>
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UniProt ID	<a href="#">Q6YI46</a>
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