



Anti-TREM2 Antibody

Alternative Names: TREM-2, TREM2a, TREM2b, TREM2c, Trggering receptor expressed on myeloid cells 2, Trggering receptor expressed on myeloid cells 2a, Triggering receptor expressed on monocytes 2

Catalogue Number: AB21-10133-100ug

Size: 100 µg

Background Information

Triggering receptor expressed on myeloid cells 2 (TREM2) is a cell surface transmembrane glycoprotein with V-immunoglobulin extracellular domains and cytoplasmic tails [1]. It is expressed in myeloid cells including dendritic cells, granulocytes, and tissue-specific macrophages such as osteoclasts. In the brain, TREM2 is only expressed by microglia and in the central nervous system expression of TREM2 varies with higher expression in the hippocampus, spinal cord and white matter.

TREM2 plays a complex role in neuroinflammation with expression of TREM2 being upregulated in pathological conditions such as Parkinson's disease, Amyotrophic lateral sclerosis (ALS), stroke, traumatic brain injury and Alzheimer's Disease [2]. TREM2 has also been shown to have a role in potential mechanisms linking urban air pollution to Alzheimer's Disease through its involvement in the regulation of neuroinflammation [3].

Product Information

Antibody Type:	Polyclonal	Host:	Rabbit
Isotype:	IgG	Species Reactivity:	Human, Mouse, Rat, Dog, Pig, Cow, Horse
Immunogen:	KLH conjugated synthetic peptide from human TREM2		
Format:	100 µg in 100 µl PBS with 0.03% Proclin300, 50% glycerol, pH7.3.		
Storage Conditions:	6 months: 4°C. Long-term storage: -20°C. Avoid multiple freeze and thaw cycles.		
Applications:	WB ELISA IHC-P IHC-F ICC IF WB 1:500-2000. ELISA 1:500-1000. IHC-P 1:100-500. IHC-F 1:100-500. ICC 1:100-500. IF 1:100-500.		

Additional Information

Subcellular location:	Cell membrane, Secreted	MW:	25kDa (Intended as a general guide and does not allow for all isoforms and species variations)
Gene ID	54209	Uniprot ID:	Q9NZC2



References

[1] Bouchon A, Dietrich J, Colonna M. Cutting edge: inflammatory responses can be triggered by TREM-1, a novel receptor expressed on neutrophils and monocytes. *J Immunol.* 2000;164:4991–5.

[2] Gratuze, M., Leyns, C.E.G. & Holtzman, D.M. New insights into the role of TREM2 in Alzheimer's disease. *Mol Neurodegeneration* 13, 66 (2018).

[3] Hendrik J. Greve, Christen L. Mumaw, Evan J. Messenger, Prasada R. S. Kodavanti, Joyce L. Royland, Urmila P. Kodavanti and Michelle L. Block. Diesel exhaust impairs TREM2 to dysregulate neuroinflammation. *J Neuroinflammation.* 2020; 17: 351.

Images

IHC of FFPE Rat brain
TREM2: Cat No: AB21-10133
Antibody dilution: 1:200

