

## Anti-POVPC/PGPC [10C12] Standard Size Ab02915-21.0

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

**Isotype and Format:** Mouse IgM, Kappa

**Clone Number:** 10C12

**Alternative Name(s) of Target:** POVPC; PGPC

**UniProt Accession Number of Target Protein:**

**Published Application(s):** functional assay, SPR, ELISA, IF

**Published Species Reactivity:** Species independent

**Immunogen:** The mouse version of this antibody was generated by feeding an ApoE KO mice with a high-fat western diet.

**Specificity:** This antibody is specific for oxidized phospholipids POVPC and PGPC. These are lipids play an important role in cardiovascular disease.

**Application Notes:** When injected in ApoE KO mice, the mouse version of this antibody decreased accumulation of macrophages in the brachiocephalic artery and decreased OxPL-induced inflammatory response (Cherepanova and Owens, 2014). To study the binding of its ligands a surface plasmon resonance experiment was preformed on POVPC, PGPC and DMPC using the mouse version of this antibody. Modified Russell-Movat (Movat) staining for morphometric analysis of the brachiocephalic arteries was preformed using the mouse version of this antibody. To confirm the binding of this antibody to POVPC and PGPC an ELISA was preformed (Cherepanova et al, 2019; PMID:31645128).

**Antibody First Published in:** Cherepanova et al. Novel Autoimmune IgM Antibody Attenuates Atherosclerosis in IgM Deficient Low-Fat Diet-Fed, but Not Western Diet-Fed Apoe<sup>-/-</sup> Mice Arterioscler Thromb Vasc Biol. 2020 Jan;40(1):206-219. [PMID:31645128](#)

**Note on publication:** A novel IgM autoantibody was generated, 10C12, from the spleens of Apoe<sup>-/-</sup> mice fed a long-term Western diet, that demonstrated potent OxPL neutralizing activity in vitro and the ability to inhibit macrophage accumulation within arteries of Apoe<sup>-/-</sup> mice fed a Western diet for 4 weeks.

## Product Form

**Size:** 50 µg Purified antibody.

**Purification:** Affinity Purified using a recombinant lectin column

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.