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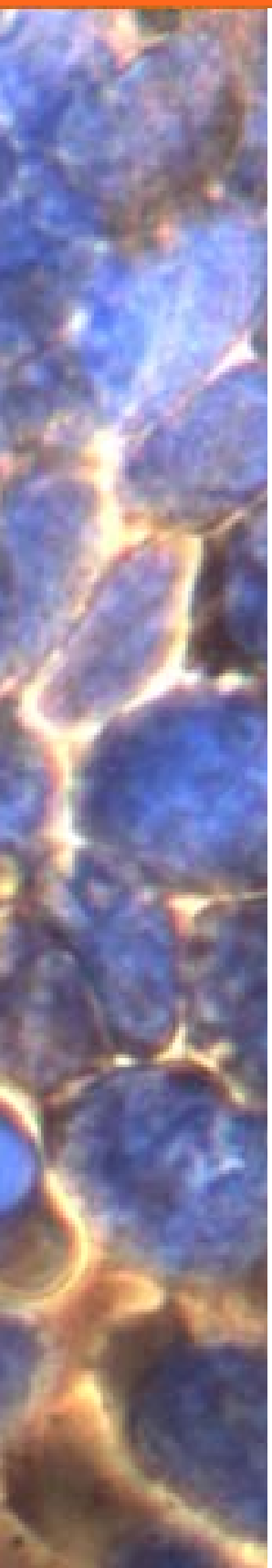
# Scramblase regulates inflammation



*In Brief*

This technology is a DNA sequence encoding the protein phospholipid (PL) scramblase and an inhibitor of scramblase. Uses include inflammation and clearance of dying cells.

*Description*

Phospholipid scramblase ("Scramblase") is a membrane-associated protein that regulates expression of aminophospholipids (aminoPL) on the cell surface. AminoPL can provide a site for assembly of clotting factors, leading to blood coagulation and thrombosis. Exposure of the plasma membrane aminoPL also contributes to accelerated clearance of injured or apoptotic cells by the reticuloendothelial system. This patent covers the composition of scramblase and pharmacologic regulation of its activity.

*Benefits*

- Regulation of inflammatory related events

*Patent protection*

US6172210B1 DNA encoding phospholipid scramblase

US6204035B1 Methods and compositions to alter the cell surface expression of phosphatidylserine and other clot-promoting plasma membrane phospholipids

US6534640B1 Methods and compositions to alter the cell surface expression of phosphatidylserine and other clot-promoting plasma membrane phospholipids

*Publications*

Kassas A, Moura IC, Yamashita Y, Scheffel J, Guérin-Marchand C, Blank U, Sims PJ, Wiedmer T, Monteiro RC, Rivera J, Charles N, Benhamou M. Regulation of the tyrosine phosphorylation of Phospholipid Scramblase 1 in mast cells that are stimulated through the high-affinity IgE receptor. *PloS One*. 2014;9:e109800.

Chen C-W, Sowden M, Zhao Q, Wiedmer T, Sims PJ. Nuclear phospholipid scramblase 1 prolongs the mitotic expansion of granulocyte precursors during G-CSF-induced granulopoiesis. *J Leukoc Biol*. 2011;90:221–233.

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