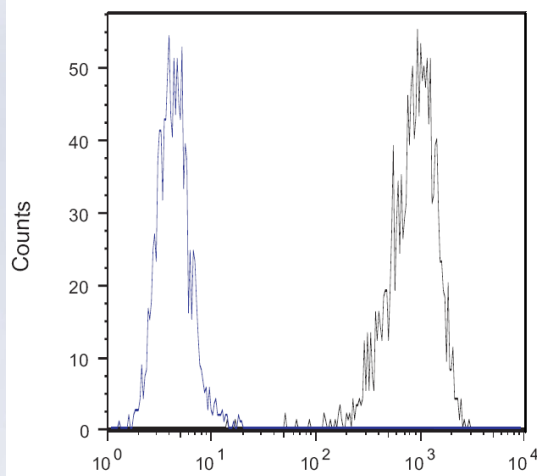


Licensing opportunity RBL-C5aR Cell Line

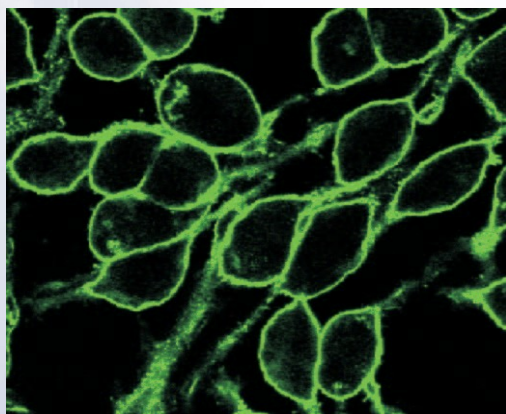
Staining of cell surface C5aR by flow cytometry and LSM

Blue: untransfected RBL-2H3 cells
Black: RBL-C5aR

C5aR stained with anti-C5aR mAb S5/1 and goat-anti-mouse-FITC



Mean channel of fluorescence



Laser microscopy image

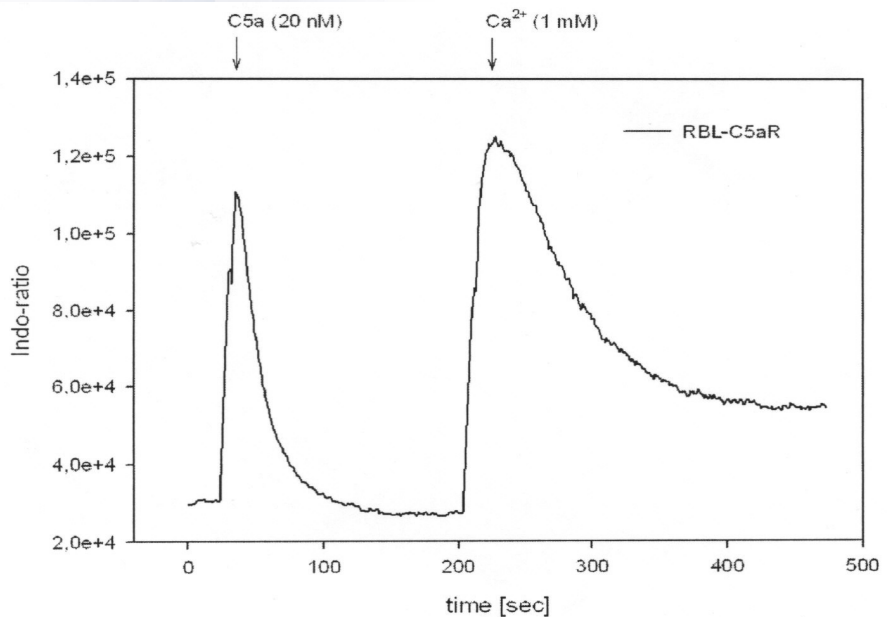
Reference: Langkabel et al. Eur. J. Immunol. 1999 29:3035

The **C5a-receptor** is a cell surface receptor for C5a, an element of the biochemical cascade of the **complement system**. C5a is an important chemotactic protein, helping recruit inflammatory cells and has anaphylatoxin activity (mast cell degranulation, increased vascular permeability, smooth muscle contraction). The C5a-receptor (**CD88**) is a receptor originally described on neutrophils and monocytes but recently found on hepatocytes, epithelial cells, endothelials and tissue mast cells.

Scientists at the University of Göttingen developed a transfectant **RBL-C5aR cell line** which is able to express more than one million C5a-receptors on its cell surface, showing a specific **high Ca²⁺ signal**. The generated RBL-cells express C5aR in a number of 'flavours' (FLAG-tagged, N-glycosilation deficient, phosphorylation-deficient, co-transfected with other GPCR). This cell line would make the **development of a standardized assay** easy, fast, reproducible and sensitive.

C5a-induced intracellular calcium mobilization

AdBack-measurements: base-line for 25 sec in the absence of extracellular calcium
+20nM C5a (25 sec – 325 sec)
+1 mM Ca²⁺ (325 sec – 480 sec)



We are looking for companies who are interested in licensing, developing and commercializing our approach!