



Calixar and Biouniversa to publish unprecedented new insights on Pancreatic Ductal Adenocarcinoma (PDAC) in Nature Communications

Lyon (France), November 30th, 2015 – Calixar, biotech company specialized in the native isolation of complex therapeutic targets and antigens, announces new publication in Nature Communications. A project sponsored by Biouniversa (Italy) results on the identification of IFITM2 as specific partner of BAG3 at the membranes of macrophages in a context of pancreatic ductal adenocarcinoma (PDAC) showing proven delay in tumor growth.

In this paper, the authors showed for the first time that pancreatic adenocarcinoma cells secrete BAG3 that acts as a cytokine activating a paracrine loop. Indeed we show that BAG3 binds to macrophages through a membrane protein that acts as receptor, IFITM-2, and activates PI3K and the p38 MAPK signaling pathways leading to the release of a number of factors, including IL6 from macrophages that in turn stimulate tumor growth.

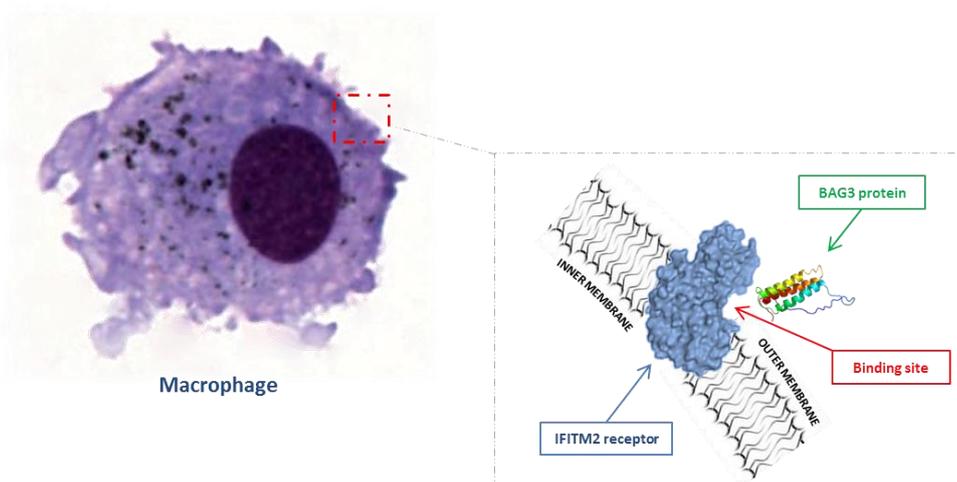
Most importantly, blocking this pathway with an anti-BAG3 antibody in xenograft tumor models, results in delayed tumor growth and abrogation of metastatic spreading.

Thanks to its patented technology, Calixar has identified specific conditions that maintain protein/protein interactions at the membrane and was therefore able to identify specific partner of the cytokine like protein BAG3.

"We were very pleased to collaborate with Biouniversa that has developed a strong expertise on pancreatic cancer biology and that has generated very convincing tools such as BAG3 antibodies with a high therapeutic potential" said Dr. Anass Jawhari, Chief Scientific Officer at Calixar.

"This work illustrates the potential of Calixar approach for protein & partner identification as well as deorphanisation in a specific key protein/protein interaction in the context of pancreatic cancer." Declared Professor Maria Caterina Turco, CEO, Biouniversa.

Reference: Nature Communications 6, Article number 8695, 5 – "BAG3 promotes pancreatic ductal adenocarcinoma growth by activating stromal macrophages", November 2015, <http://doi:10.1038/ncomms9695> or [click here](#).





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About Calixar SAS

Calixar, based in Lyon (France), develops new approaches to isolate in solution - with the highest purity levels - full-length membrane antigens and proteins (GPCRs, Ion Channels, Transporters, Receptors and Viral Proteins), while keeping their structural and functional integrity. Calixar's approach represents an opportunity for pharmaceutical companies to start and work with high quality targets or antigens before formulating vaccines, developing antibodies, and/or discovering a primary lead through Structure Based Drug Design or High Throughput Screening assays.

www.calixar.com

About Biouniversa s.r.l

Biouniversa s.r.l. is focused on discovery and development of Diagnostic and Therapeutic Products based on Founders' discovery of the biological properties of the BAG3 protein on cell death regulation. BAG3 specific reagents showed several applications in the diagnosis and treatment of human diseases involving a dysregulation of cell death, specifically cancers and cardiovascular diseases.

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