

PRESS RELEASE

Compact TALEN[™]: the next generation of TAL effector nucleases

The Scientific journal Nature Communications publishes an innovative study on ultra-precise Compact TALEN[™] mini DNA cutters

Paris, May 21, 2013 - Cellectis (NYSE PA: ALCLS), the global genome engineering specialist, announced today that the high-impact scientific journal Nature Communications has published an in-house study on the development of Compact TALENTM, the next generation of mini TAL effector nucleases.

Unlike Cellectis' first-generation TALEN[™], which require the dimerization of two molecules, this new tool based on Cellectis' proprietary TAL effector nucleases technology makes it possible to target specific DNA segments using just a single molecule. The Group is the first in its sector to develop and market such a tool.

Compact TALEN[™] were designed by Cellectis' R&D teams and notably by Dr. Marine Beurdeley, the first author of this study. This technology greatly simplifies the design and synthesis as well as the therapeutic delivery of nucleases. The study published in Nature Communications shows that these next-generation nucleases have retained *in vivo* DNA cutting capability comparable to that of the original TALEN[™]. This new technology, which is already used in plants and mammalian cells, constitutes a breakthrough in the fields of genome engineering and synthetic biology.

Dr. Marine Beurdeley holds a degree in agronomy from the *Institut National Agronomique Paris-Grignon* and a doctorate in neuroscience from the Department of Biology of the *École Normale Supérieure*. She joined Cellectis' R&D team in 2010 as Project Leader.

About Cellectis

Founded in France in 1999, the Cellectis Group bases its work on highly specific DNA engineering technologies. Its application sectors are human health, agriculture and bioenergies. Cellectis was co-founded by André Choulika, its Chairman and CEO, and is now one of the world's leading companies in the field of genome engineering, with revenue of \$27 million in 2012. Leading the field of pluripotent stem cells, Cellectis has developed expertise in drug discovery, the study of drug toxicity, and regenerative medicine. Cellectis has a solid background in the large-scale handling of stem cells up until their maturation and differentiation into functional cell types. Cellectis has a workforce of 230 employees working at 5 sites worldwide: New Brighton (Minnesota) & Cambridge (Massachusetts) in the United States, Gothenburg in Sweden, and Paris & Evry in France. The Group has signed more than 100 industry agreements with pharmaceutical, agrochemical, and biotechnology companies. The Group's clients and partners include University College London (UCL), the National Institute of Health (NIH), Novo Nordisk, the Center for iPS Cell Research and Application (CiRA) of Kyoto University, AFM, Novartis, BASF, Monsanto, Regeneron Pharmaceuticals, Bayer, and Limagrain. Since 2007, Cellectis has been listed on the NYSE Euronext Alternext market (code: ALCLS) in Paris. For more information, visit our website: www.cellectis.com.

Disclaimer

This press release and the information contained herein do not constitute an offer to sell or subscribe, or a solicitation of an offer to buy or subscribe, for shares in Cellectis in any country.

For further information, please contact:

Cellectis Philippe Valachs Company Secretary Tel: +33 (0)1 81 69 16 00 media@cellectis.com