Sponsored PDF: Maryna Gorelik

Title: Development of specific inhibitors and activators to assess the role of human Ephrin Receptors in health and disease

Executive Summary:
Signaling through the Eph family of cell surface receptors is crucial for embryonic development and the maintenance of adult tissues. Given the central role of the 14 Eph receptors in controlling cell fate, it is not surprising that they also play a central role in oncogenesis and other pathological conditions. However, the signaling mechanisms of Eph receptors are extremely complex, and developing an effective therapeutic intervention for a particular disease requires a comprehensive understanding of Eph function. The goal of this project is to generate a collection of synthetic antibody molecules that block and activate every Eph receptor. This toolkit of antibody reagents will allow researchers to identify the best approach for targeting Eph receptors individually or in combination to counteract a particular disease state. This collection of Eph-modulating antibody reagents will expand the existing antibody portfolio of the Centre for the Commercialization of Antibodies and Biologics (CCAB).