

FULLY-HUMAN MONOCLONAL ANTIBODIES AGAINST HUMAN EPHRINB2 AND EPHB4

SUMMARY

The National Cancer Institute's Nanobiology Program is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize fully-human monoclonal antibodies against human EphrinB2 and EphB4.

REFERENCE NUMBER

E-331-2008

PRODUCT TYPE

- Research Materials

KEYWORDS

- Research Tools
- Monoclonal Antibodies
- Ephrin Receptor Tyrosine Kinases

COLLABORATION OPPORTUNITY

This invention is available for licensing.

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DESCRIPTION OF TECHNOLOGY

Ephrin receptor tyrosine kinases and their ephrin ligands have been implicated in cancer pathogenesis. Ephrin receptors and ligands affect tumor growth, invasiveness, angiogenesis, and metastasis. Ephrin signaling activities in cancer are complex and are only now beginning to be uncovered.

Researchers at the National Cancer Institute-Frederick, NIH, have developed a set of five fully-human monoclonal antibodies against human Ephrin-B2 and Ephrin type-B receptor 4 ("EphB4"). The antibodies were identified by screening a naive human antibody phage display library against Ephrin-B2 and EphB4. These human monoclonal antibodies have high affinity and specificity for Ephrin-B2 and EphB4.

Patent Status:

Research Material. Patent protection is not being pursued for this technology.

POTENTIAL COMMERCIAL APPLICATIONS

- Research reagents for in vitro/in vivo investigation of Ephrin receptor and ligand interactions
- Targeting reagents for in vivo imaging
- Research reagents for protein co-crystallization

COMPETITIVE ADVANTAGES

- High affinity and antigen specificity
- Bind both soluble ectodomains and cell surface-expressed molecules

INVENTOR(S)

[Dimitar S Dimitrov](#) (NCI)

DEVELOPMENT STAGE

- Discovery (Lead Identification)

PATENT STATUS

- **U.S. Filed:** Research Material -- patent protection is not being pursued for this technology

THERAPEUTIC AREA

- Cancer/Neoplasm