The C-myc Coding Region Determinant Binding Protein (CRD-BP) and Its Nucleic Acid Sequence

INVENTORS • Jeffrey Ross

WARF: P98088US
View U.S. Patent No. 6,255,055 in PDF format.

The Wisconsin Alumni Research Foundation is seeking commercial partners interested in the identification and function of a protein that causes the stabilization of c-myc mRNA.

OVERVIEW

C-myc protein levels influence cell proliferation, differentiation, and neoplastic transformation. Not surprisingly, given c-myc's roles in normal cell function, c-myc over-expression has also been found to play a role in tumor formation in experimental models and in human patients.

THE INVENTION

A UW-Madison researcher has identified a coding region determinant binding protein (CRD-BP) that stabilizes c-myc mRNA by binding to the coding region determinant (CRD) on c-myc, thereby increasing the abundance of c-myc protein. Several properties of the CRD-BP link it to human cancer, including a recent study where 15 out of 21 colon cancer specimens were positive for CRD-BP expression. The cancer-related protein can be detected by examining patient tissue and comparing the expression level with control levels.

APPLICATIONS

- Diagnosing the presence or absence of cancer in human tissue, specifically from tumors arising from epithelial cells (including breast and colon cancer)
- Possibly inhibiting cancer cell growth

KEY BENEFITS

- CRD-BP is projected to be an improved human cancer marker as compared to existing diagnostic techniques.
ADDITIONAL INFORMATION

Tech Fields
Diagnostic Assays - Cancer
Pharmaceuticals & Vitamin D - Oncology & hematology

CONTACT INFORMATION

For current licensing status, please contact Jennifer Gottwald at jennifer@warf.org or 608-960-9854.