

## **CDK2-flavonoids interaction by NMR**

Hojung Kim, Bora Jung, Yukyung Lee, Joong-Hoon Ahn, Yoongho Lim

Bio/Molecular Informatics Center, Konkuk University

TEL: +82-2-2049-6106, FAX: +82-2-3437-6106

### **Abstract**

CDK2 inhibitors induce apoptosis. Because flavopiridol was the first potent CDK inhibitor, we tested flavonoids with a wide scope<sup>1</sup>). We performed the binding assay of CDK2 and flavonoids using NMR spectroscopy. While the relaxation time of small molecules, flavonoids are fast, those of the complexes of CDK2 and flavonoids are slow. As a result, the binding of CDK2 on flavonoids causes a change of <sup>1</sup>H NMR signal.

### **Reference**

1. Keith C. Bible, Roy H Bible, Jr., Timothy J. Kottke, Phyllis A. Svingen, Kun Xu, Yuan-Ping Pang, Elisabeth Hajek, and Scott H. Kaufmann, Flavopiridol binds to duplex DNA, (2000) Cancer Res. 60(9), 2419-28.