MMP-2. In present study suggests that H-ras-induced activation of both p38 and ERK results in more invasive and motile phenotypes of human breast epithelial cells, whereas N-ras activation of ERKs is not sufficient for these phenotypic changes.

Oral Presentations - Field D

[D1. Medicinal Chemistry] [D2. Pharmacognosy] [D3. Oriental Medicine] [D4. Analytical Chemistry]

[OD-1] [04/18/2003 (Fri) 14:45 - 15:00 / Orchid]

ent-Kaurane Diterpenoids from *Croton tonkinensis* Inhibit LPS-induced Transcription Factor NF-κB Activation and NO Production

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Nuclear factor-κB (NF-κB) belongs to a group of homodimers and heterodimers of Rel/NF-κB proteins that bind to DNA target sites, where they directly regulate gene transcription. The activation of NF-κB has been shown to mediate inflammation and suppress apoptosis. Activated NF-κB has been found in various inflammatory diseases such as rheumatoid arthritis, atherosclerosis, asthma, inflammatory bowel disease, and *Helicobacter pylori*-associated gastritis and associated with cancer, cachexia, diabetes, euthyroid sick syndrome, and AIDS. With its apparent involvement in a variety of human diseases, NF-κB has been an attractive target in the discovery of anti-inflammatory and cancer chemopreventive drugs. *Croton tonkinensis* Gagnep. (Euphorbiaceae), commonly named in Vietnamese as "Kho sam Bac Bo", is a tropical shrub native to the Northern Vietnam. Its dried leaves have been used in Vietnamese traditional medicine to treat burn (boil), abscesses, impetigo, abdominal pain, dyspepsia, gastric and duodenal ulcers. Bioactivity-guided fractionation of MeOH extract from leaves of *C. tonkinensis* toward NF-κB inhibitory activity led to the isolation of four active *ent*-kaurane-type diterpenoids including two new *ent*-1β-acetoxy-7α,14β-dihydroxykaur-16-en-15-one and *ent*-18-acetoxy-7α,14β-dihydroxykaur-16-en-15-one together with two known *ent*-7α,14β-dihydroxykaur-16-en-15-one and *ent*-18-acetoxy-7α-hydroxykaur-16-en-5-one. These *ent*-kauranoids were demonstrated to strongly inhibit NF-κB activation in LPS-induced murine macrophage RAW264.7 at IC_{50} from 0.07 μM to 0.42 μM. Consistently, the *ent*-kauranoids markedly reduced LPS-stimulated NO production in a comparable concentration-dependent manner, thus appeared to inhibit iNOS gene expression by preventing the activation of NF-κB.

[OD-2] [04/18/2003 (Fri) 15:00 - 15:15 / Orchid]

Sensitive Determination of Alkylphenols, Chlorophenols, and Bisphenol A using GC/MS-SIM in Papers Materials

Kim Hyub[o] Kim Jin-Ho Kim Yong-Hwa