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Limonene, (+/-)-

National Cancer Institute

Source

National Cancer Institute. *Limonene, (+/-)-*. NCI Thesaurus. Code C61709.

A racemic mixture of limonene, a natural cyclic monoterpene and major component of the oil extracted from citrus rind with chemo-preventive and antitumor activities. The metabolites of DL-limonene, perillic acid, dihydroperillic acid, uroterpenol and limonene 1,2-diol are suggested to inhibit tumor growth through inhibition of p21-dependent signaling, induce apoptosis via the induction of the transforming growth factor beta-signaling pathway, inhibit post-translational modification of signal transduction proteins, result in G1 cell cycle arrest as well as cause differential expression of cell cycle- and apoptosis-related genes.