

Suberitenone B: A Novel Inhibitor of
Cholesteryl Ester Transfer Protein (CETP) with
an Unprecedented Skeletal Class from the
Antarctic *Sponge Suberites* sp.

Jongheon Shin, Youngwan Seo, Jung-Rae Rho,
and Eunjoo Baek^o

Marine Natural Products Chemistry Lab., Korea Ocean
Research & Development Institute

Byoung-Mog Kwon, Tae-Sook Jeong, Song-Hae Bok
Bioproducts RG, Korea Research Institute of
Bioscience & Biotechnology, KIST

Cholesteryl Ester Transfer Protein (CETP) mediates the transfer of cholesterol ester and triglyceride between high-density lipoprotein (HDL) and other low-density lipoproteins, therefore, it might influence HDL levels. The levels of HDL is closely related to the atherogenic diseases in human and there were several reports that the transgenic mice expressing CETP had much worse atherosclerosis than non-expressing control one. Therefore, selective inhibitors of CETP have the potential to be used as antiatherosclerotic agents. Continued screening for potent inhibitors of CETP led to the isolation of Suberitenone B from marine sponge.

Suberitenone B, sesterterpenoids of a new skeletal class have been isolated from the sponge *Suberites* sp. collected from King George Island the Antarctic. The structure of the metabolite has been determined by NMR experiments and chemical methods.