# Synthesis, Characterization and Antioxidant Activity of 2-Halobenzoyl Thiourea Bearing alpha- and beta-alanine

By: Ngah, N (Ngah, Nurziana)[1]; Mohamed, NA (Mohamed, Nor Azanita)[1]; Darnis, DS (Darnis, Deny Susanti)[1]

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## Abstract

Six new 2-halobenzoylthiourea compounds bearing alpha- and beta-alanine have been successfully synthesized and characterized using CHNS microelemental analysis and spectroscopic methods including FTIR, UV-Vis and NMR. Microelemental analysis data of the compounds were in agreement with the theoretical values. The MR spectra showed the presence of important bands of the compounds while the H-1-NMR and C-13-NMR exhibited the expected chemical shifts. The compounds exerted weak antioxidant activity in DPPH scavenging test and moderate to good activity in beta-carotene bleaching test. The inclusion of halogen atoms has facilitated the released of hydrogen atoms and introduction of alpha- and beta-alanine have increased the beta-carotene bleaching and DPPH scavenging activities of the compounds.

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## Author Information

**Reprint Address:** Ngah, N (reprint author)

+ Int Islamic Univ Malaysia, Kulliyyah Sci, Dept Chem, Jalan Sultan Ahmad Shah, Kuantan 25200, Malaysia.

**Addresses:**

+ [1] Int Islamic Univ Malaysia, Kulliyyah Sci, Dept Chem, Jalan Sultan Ahmad Shah, Kuantan 25200, Malaysia

**E-mail Addresses:** nurziana@iium.edu.my

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