**Application Note** 

Date: 1992.6.18

No. 220040H-E

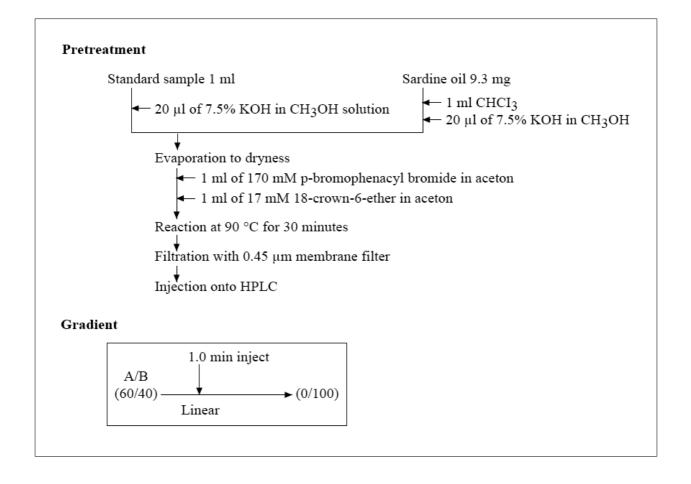
## Analysis of free fatty acids in sardine oil

It is well-known that a lot of beneficial bioactive substances are included in sardine oil. The free fatty acids in sardine oil were analyzed by using pre-column derivatization method with p-bromophenacyl bromide in order to detect them with high sensitivity and selectivity. A silica C18 column Finepak SIL C18S was employed for the separation. A solution of acetonitrile and water was used for as mobile phase in gradient elution method.

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## Conditions:

Pump: PU-980 UV-970 Detector : 250 nm Wavelength : Finepak SIL C18S Column :  $A: CH_3CN/H_2O$  (50/50) Eluent :  $B: CH_3CN$ 1.0 ml/min Flow rate : Sample : C12, C14, C16, C18, C22 Concentration of the standard sample: C12:10.6 mg C14:10.8 mg C16 : 10.4 mg C18:11.4 mg C22: 10.5 mg / 100 ml CHCL<sub>3</sub>





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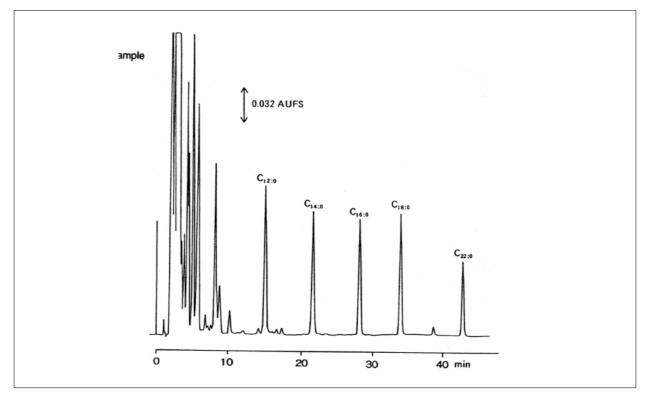


Fig. 1 Standard sample

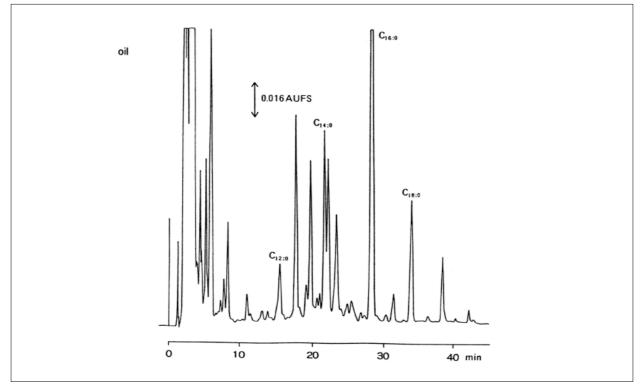


Fig. 2 Sardine oil

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