

Acetylcholine and Choline for Tissue, Blood and Other Samples

< HPLC Conditions >

HPLC-ECD system	HTEC-510 (M-510/514)
Separation Column	AC-GEL (φ4.6 x 150 mm)
Enzyme Reactor	AC-ENZYM3 (φ3.0 x 4 mm)
Precolumn for sample	PC-04-CH (φ4.0 x 5 mm)
Precolumn for mobile phase	PC-04-CH (φ4.0 x 5 mm)
Mobile Phase	100 mM KHCO ₃ including 50 mg/L EDTA · 2Na and, 400 mg/L Sodium 1-Decanesulfonate(SDS)
Flow rate	500 μL/min
Column Temp.	33 °C
Working Electrode	WE-PT (Platinum)
Gasket	GS-25P
Applied potential	+450 mV (+300~450 mV) vs. Ag/AgCl
Time Constant	3.0 sec

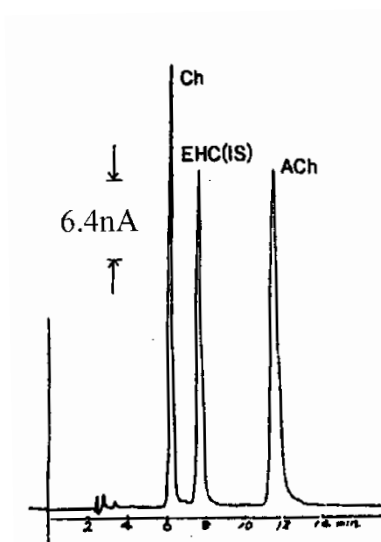


Fig. 1 Chromatogram obtained with standard mixture. (Ch:50pmol, EHC and ACh: 100pmol)

< Mobile Phase Preparation >

Potassium hydrogen carbonate (KHCO ₃)	H ₂ O	Sodium Decanesulfonate	1-	EDTA-2Na
10.0 g	1000 mL	400 mg		50 mg

< Preparing Reagents >

Water Quality

This requirement is strict.

To prepare mobile phase and other reagents for ACh analysis, please use ultrapure water. We highly recommend the MilliQ system or similar water purification system producing Type 1 water. Electric resistance of water needs to be 18.2 MΩ-cm or higher. Commercial HPLC grade water can be used but do not store for more than two weeks after opening the bottle.

Eicom Corporation HQ

113 Kita Enmenden-cho Shimotoba, Fushimi-ku Kyoto, Japan 612-8497

<https://www.eicom-usa.com>