

### Point of care determination of AChE Activity

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#### ChE check mobile

Innovative test system to determine acetyl cholinesterase activity directly on patients

What distinguishes the test system?

- ✓ **Point of care** Patient-orientated rapid test
- ✓ Unique AChE determination from whole blood
- ✓ Simple 1 drop of blood is sufficient
- ✓ **Fast** Result in 4 minutes

The test system ChE check mobile was developed in close cooperation with the Pharmacology and Toxicology Institute of the German Armed Forces in Munich. The device measures acetyl-and butyrylcholinesterase activity.





## Test Performance



1. Determine the background value of the cuvette



2. Take blood sample and place capillary in cuvette.



3. Menu guides user through haemoglobin measurement.



4. Exchange white cap with red cap containing AChE substrate.



5. Dissolve substrate by shaking the cuvette.



6. Test results are available within 4 minutes..

# ChE check mobile Innovative - simple - fast

#### Reasons for a rapid AChE test

Acetylcholine provides synaptic transmission between nerve and muscle, and is an important neurotransmitter for many cognitive processes in the central nervous system. The enzyme acetyl cholinesterase (AChE) is, thus, the enzyme responsible for significant regeneration of the acetylcholine receptor. In contrast to cholinesterase, erythrocyte-bound AChE correlates with AChE in the neurons. It can, therefore, be used as a surrogate parameter for synaptic AChE.

A number of chemical compounds and drugs inhibit AChE activity. In the case of pesticides or nerve agents, this can cause poisoning. AChE inhibitory substances are also used in the treatment of Alzheimer's disease

The activity measurement of erythrocyte-bound AChE currently provides already valuable help in the diagnosis and treatment of poisoning.







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#### Item Number:

CH1104 ChE check mobile Starter Kit AChE CH1105 ChE check mobile Starter Kit BChE CH1106 ChE check mobile Test Kit AChE CH1107 ChE check mobile Test Kit BChE