



Cholinesterase Biomonitoring

Cholinesterase is an enzyme in the nervous system that breaks down acetylcholine, a neurotransmitter that carries signals between nerves and muscles.

Cholinesterase-inhibiting pesticides (Class I and Class II organophosphates (OP) and carbamates reduced cholinesterase activity.

Baseline

Measure baseline prior to working with pesticides; at least 30 days of free OP exposure. Establish baselines annually.

Testing

Measure both acetylcholinesterase (red blood cell cholinesterase-AChE) and butyryl cholinesterase (plasma-cholinesterase-PChE). Both are recommended; but PChE if only performing 1 test.



ALS Malaysia is part of the ALS global laboratory group and is an ISO 17025 accredited laboratory equipped with state of the art facilities. We provide testing services to various government and private sectors across the world.

Periodical biomonitoring is recommended (6 monthly) or each time workers exceeds/reaches 30 hours of exposure within any 30 days period after the baseline or last exposure test.

Use the same laboratory and same methodology for all tests so results may be accurately compared.

At ALS, we are dedicated to support Occupational Health Doctors (OHD) to provide cholinesterase analysis.

Our laboratory offers an accredited test method by Department of Standards Malaysia for cholinesterase (PChE) analysis.

Test Method: Cholinesterase Analysis by Chemical Analyzer

Sample size required: Plasma or Serum (1 mL)

Our standard laboratory turnaround time is 5-7 working days from the receipt of samples.

Please contact us to discuss your analysis requirement and we will assist you with the proposal.

