

Homocysteine

Description	Homocysteine is generated by leukocytes in vitro.
Indication	Hyperhomocysteinaemia has been considered a cardiovascular risk factor and can be raised in vitamin B12 and or folate deficiency. Monitoring treatment response in Homocystinuria.
Additional Info	Homocysteine can increase with age, smoking and by concurrent use of drugs such as phenytoin, methotrexate and carbamazepine.
Concurrent Tests	N/A
Dietary Requirements	N/A
Interpretation	Normal levels are <15 µmol/L Levels > 100 µmol/L indicate severe homocysteinaemia and homocystinuria Vitamin deficiencies of B12 and Folate are associated with high homocysteine. High levels are associated with an increased risk of heart attack or stroke.
Collection Conditions	A fasting sample is preferred. Blood should be collected into a FEDTA tube (Sarstedt yellow top) and transported immediately to the lab. The sample must be centrifuged and plasma removed from cells within 1 hour to avoid falsely elevated levels.
Frequency of testing	As required