



right solutions.
right partner.

Clinical sample analysis



ALS Scandinavia has more than 15 years of experience in analysing human biological matrices using high resolution ICP-MS (ICP-SFMS) and we offer accredited analyses of 68 elements in whole blood, plasma, serum and urine. In combination with our isotope- and elemental speciation capabilities, ALS Scandinavia offer you a comprehensive portfolio for analyses of clinical samples.

Metal analysis

We offer accredited analysis of 68 elements in whole blood, plasma, serum and urine. Measuring the levels of metals in clinical samples, often referred to as bio-monitoring, is required in a variety of fields. Medicine, occupational health studies and therapeutic research all rely on such information. Due to the high toxicity of some elements, measurements at very low levels are often required. The ALS elemental laboratory is designed to enable analyses at these low levels.

Speciation analysis

We offer speciation analysis for arsenic, mercury and selenium in human biological matrices. The toxicity and biological effects of an element depend to a large extent on the chemical form(s) in which it is present. One example is arsenic for which the inorganic species (e.g. arsenite) have been classified as carcinogenic while many organic species are benign. The non-toxic species arsenobetaine is predominant in marine animals and the concentration of total arsenic may consequently be elevated in the body fluids of individuals who consume a lot of fish.

Isotope analysis

We offer a large variety of isotope analyses. There are numerous medicinal and research areas where isotoperatios are examined in human biological matrices. Isotope ratio measurements in clinical samples are for example used for monitoring occupational or environmental exposure, tracer studies as well as metabolic- and nutrition research. Experienced employees at ALS Scandinavia have co-written numerous research articles published in internationally-renowned scientific journals concerning analyses of clinical samples, regarding both isotopes and metals.

GLP (Good Laboratory practice) services

ALS Scandinavia's elemental laboratory in Sweden holds a GLP statement of compliance and is thus a qualified test site for analyses within non-clinical safety studies. All GLP compliant analyses are performed by trained and experienced professionals devoted to offering services that are tailor-made for the project at hand.

Test kits

Test tubes/test kits suitable for our analyses and matrices as well as sampling instructions can be ordered from us.