

*Manufactured by attomol GmbH

What is Quicktype?

Quicktype is a reliable mutation analysis system based on a qualitative polymerase chain reaction (PCR) and an integrated allele specific probe hybridization to increase the sensitivity and specificity of the test.

What time is required to perform the test and is it labour-intensive?

No, the Quicktype test system is not labour-intensive. You have about 30 minutes personnel working time only. The total incubation time takes 2 h for the PCR reaction and about 45 minutes for the gel electrophoresis.

What is the principle of the test?

Blood is taken by venipuncture and DNA is isolated by a commercial DNA isolation system. Afterwards the PCR reaction is pipetted, performed in a common thermocycler and the PCR product is run on an agarose gel electrophoresis system.

How do I decide whether the patient shows genetic alterations?

When you perform the Quicktype mutation analysis you make a size differentiation between your homozygous wildtype and mutated alleles. In figure 1 typical patterns of four patient samples, positive, and negative controls are shown. We recommend a heterozygous patient sample as positive control.

WT = homozygous **wild type**
 HZ = **heterozygous**
 MU = homozygous **mutation**

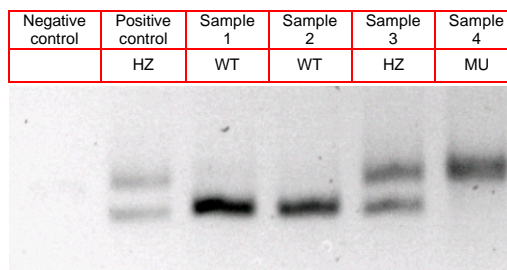


Fig. 1: Analysis example of a QuickType mutation kit (2.5% agarose)



MUTATION ANALYSIS*

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Hereditary risk of thrombosis

- ✓ Factor V Leiden-mutation (1691G>A)
- ✓ Factor II Prothrombin-mutation (20210G>A)
- ✓ Hyperhomocysteinaemia (MTHFR 677C>T, 1298A>C)
- ✓ Plasminogen activator inhibitor 1 (PAI-1 4G/5G)

Hereditary hyperlipidemia

- ✓ Apolipoprotein E (Allele E2/E3/E4)
- ✓ Apolipoprotein B-100 (R3500Q)

Hereditary haemochromatosis

- ✓ Haemochromatosis (C282Y, H63D, S65C)

Hereditary Alpha1-antitrypsin-deficiency

- ✓ α -1-Antitrypsin (Allele PiM/PiS/PiZ)

Lactose intolerance

- ✓ Lactose intolerance (-13910C>T)

HLA-B*27 determination

- ✓ HLA-B*27

Pharmacokinetics

- ✓ 5-Fluorouracil intolerance
(DPD-Exon 14-skipping mutation)
- ✓ Methotrexate intolerance (MTHFR 677C>T, 1298A>C)