



Figure 1. Illustration of relative mutation dosage (RMD) and relative haplotype dosage analysis (RHDO) principles. Striped represents the mutated alleles and block shading the wild-type alleles. The relative amount of mutant (M) vs wild-type (WT) allele detected in maternal plasma indicates the genotype of the fetus. In RMD the comparison is made between counts at the specific mutation site. In RHDO, sequencing of an affected proband in the family facilitates determination of the parental haplotypes derived from informative heterozygous SNPs linked to the mutation site. Comparing haplotypes in the maternal plasma made up of multiple SNPs increases the statistical power of the test over comparing a single mutation site.