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# NQO1\*2 Allele

National Cancer Institute

## Source

National Cancer Institute. *NQO1\*2 Allele*. NCI Thesaurus. Code C78134.

Human NQO1\*2 allele is located in the vicinity of 16q22.1 and is approximately 17 kb in length. The NQO1 \*2 allele has a C609T substitution in the cDNA, which encodes NAD(P)H dehydrogenase [quinone] 1\*2 protein that results in the amino acid change P187S. The NQO1\*2 protein has both diminished catalytic activity and altered degradation by the ubiquitin-proteasomal system. Expression of this allele is associated with increased risk of benzene hematotoxicity, asthma and leukemias and decreased breast cancer survival.