iPLEX® ADME
CYP2C19 Panel[1] v1.0
Available through Assays by Sequenom

Investigate and confirm pharmacogenetic biomarkers in CYP2C19 gene associated with drug metabolism with high accuracy and rapid results.

The iPLEX ADME CYP2C19 Panel v1.0 is a set of 31 designed and pre-validated SNP assays for use in the screening of polymorphisms in CYP2C19 gene using Sequenom's iPLEX Pro reagent[1] sets. Screening for variants in CYP2C19 gene allows clinical researchers develop dosing protocols and surveillance techniques toward model drugs and experimental biomarkers.

- Analyze 31 mutations in 1 pharmacogenetically relevant gene
- Obtain biologically relevant data with the CYP2C19 panel covering most of the known haplotypes
- Use as little as 20 ng of DNA per sample

Gene	Alleles	
CYP2C19	CYP2C19*1A	CYP2C19*11
	CYP2C19*1B	CYP2C19*12
	CYP2C19*1C	CYP2C19*13
	CYP2C19*2	CYP2C19*14
	CYP2C19*2B	CYP2C19*15
	CYP2C19*3A	CYP2C19*16
	CYP2C19*3B (also called CYP2C19*20)	CYP2C19*17
	CYP2C19*4A	CYP2C19*18
	CYP2C19*4B	CYP2C19*19
	CYP2C19*5A	CYP2C19*22
	CYP2C19*5B	CYP2C19*23
	CYP2C19*6	CYP2C19*24
	CYP2C19*7	CYP2C19*25
	CYP2C19*8	CYP2C19*26
	CYP2C19*9	CYP2C19*27
	CYP2C19*10	CYP2C19*28

[1] The iPLEX ADME CYP2C19 Panel is For Research Use only. Not for use in diagnostic procedures.

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Analysis Method

Screening with iPLEX® ADME CYP2C19 panel is performed by PCR amplification and primer extension using the iPLEX ADME CYP2C19 reagents. The panel consists of 2 multiplexed wells that are run on each sample using 10ng of input DNA per well. Mutations are detected after the sample run.

Equipment and Software Required

- MassARRAY® System[1]
- MassARRAY NanoDispenser[1]
- Typer Software[1] version 4.0.20

Ordering Information:

2 x 384 Format

10 x 384 Format

10 x 96 Format

iPLEX ADME CYP2C19 PCR Primers[1]

iPLEX ADME CYP2C19 Extend Primers[1]

PCR Reagent Sets

iPLEX Pro Extension Reagent Set[1]

To place an order, please contact the order desk at orderdesk@sequenom.com, or call (858) 202-9215.

AVAILABLE THROUGH ASSAYS BY SEQUENOM

CYP2C19 Allele Nomenclature

Allele	Nucleotide changes	Amino acid change	dbSNP IDs
CYP2C19*1A	None	None	
CYP2C19*1B	99C>T; 991A>G	I331V	rs17885098; rs3758581
CYP2C19*1C	991A>G	I331V	rs3758581
CYP2C19*2 (includes *2A and *2C)	99C>T; 681G>A; 991A>G	Splicing defect; I331V	rs17885098; rs4244285; rs3758581
CYP2C19*2B	99C>T; 276G>C; 681G>A; 991A>G	E92D; splicing defect; I331V	rs17885098; rs17878459; rs4244285; rs3758581
CYP2C19*3A	636G>A; 991A>G	W212X; I331V	rs4986893; rs3758581
CYP2C19*3B (also called CYP2C19*20)	636G>A; 991A>G; 1078G>A	W212X; D360N; I331V	rs4986893; rs3758581; rs144036596
CYP2C19*4A	1A>G; 99C>T, 991A>G	GTG initiation codon; I331V	rs28399504; rs17885098; rs3758581
CYP2C19*4B	-806C>T; 1A>G; 99C>T, 991A>G	GTG initiation codon; I331V	rs12248560; rs28399504; rs17885098; rs3758581
CYP2C19*5A	1297C>T	R433W	rs56337013
CYP2C19*5B	99C>T; 991A>G; 1297C>T	I331V; R433W	rs17885098; rs3758581; rs56337013
CYP2C19*6	99C>T; 395G>A; 991A>G	R132Q; I331V	rs17885098; rs72552267; rs3758581
CYP2C19*7	19294T>A	Splicing defect	rs72558186
CYP2C19*8	358T>C	W120R	rs41291556
CYP2C19*9	99C>T; 431G>A; 991A>G	R144H; I331V	rs17885098; rs17884712; rs3758581
CYP2C19*10	99C>T; 680C>T; 991A>G	P227L; I331V	rs17885098; rs6413438; rs3758581
CYP2C19*11	99C>T; 449G>A; 991A>G	R150H; I331V	rs17885098; rs58973490; rs3758581
CYP2C19*12	99C>T; 991A>G; 1473A>C	I331V; X491C; 26 extra aa	rs17885098; rs3758581; rs55640102
CYP2C19*13	991A>G; 1228C>T	I331V; R410C	rs3758581; rs17879685
CYP2C19*14	50T>C; 99C>T; 991A>G	L17P; I331V	rs17885098; rs3758581
CYP2C19*15	55A>C; 991A>G	I19L; I331V	rs17882687; rs3758581
CYP2C19*16	1324C>T	R442C	C19C1324T
CYP2C19*17	-806C>T; 99C>T; 991A>G	I331V	rs17885098; rs17885098; rs3758581
CYP2C19*18	99C>T; 986G>A; 991A>G	R329H; I331V	rs17885098; rs138142612; rs3758581
CYP2C19*19	99C>T; 151A>G; 991A>G	S51G; I331V	rs17885098; C19A151G; rs3758581
CYP2C19*20	See CYP2C19*3B		
CYP2C19*22	557G>C; 991A>G	R186P; I331V	rs140278421; rs3758581
CYP2C19*23	99C>T; 271G>C; 991A>G	G91R; I331V	rs17885098; rs118203756; rs3758581
CYP2C19*24	99C>T; 991A>G; 1004G>A; 1197A>G	I331V; R335Q	rs17885098; rs3758581; rs118203757; C19A1197G
CYP2C19*25	99C>T; 991A>G; 1344C>G	I331V; F448L	rs17885098; rs3758581; rs118203759
CYP2C19*26	99C>T; 766G>A; 991A>G	D256N; I331V	rs17885098; C19G766A; rs3758581
CYP2C19*27	-1041G>A; 991A>G	I331V	rs7902257; rs3758581
CYP2C19*28	55A>C; 991A>G	I19L; I331V; V374I	rs17882687; rs3758581
(Preliminary)	-1418C>T		rs3814637
(Preliminary)	-2720T>C		rs77850210

If no rs number available, polymorphism is represented by base and base change. E.g., C09C89T is base 89 C>T for CYP2C9.
Nomenclature is based on http://www.cypalleles.ki.se/cyp2c9.htm
*rare haplotypes may only be validated for wild type allele

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