MAYO CLINIC
Mayo Medical Laboratories

TEST DEFINITION

12/6/2011

Name/order code cross-reference

Code	Name
2D6O	CYP2D6 Genotype, Saliva

Test setup information

Order Code	Result Code	Title	Checking Normals	Print Normals	Perform Site *
2D6O		CYP2D6 Genotype, Saliva			MCR
	Transport temp : Ambient				
	32895	2D6 Genotype Star Alleles			
		Units:			
	32896	2D6 Duplication			
		Units:			
	32897	2D6 Deletion			
		Units:			
	32898	2D6 -1584C>G (*2A)			
		Units:			
	32899	2D6 100C>T (*10)			
		Units:			
	32900	2D6 124G>A (*12)			
		Units:			
	32901	2D6 138INST (*15)			
		Units:			
	32902	2D6 883G>C (*11)			
		Units:			
	32903	2D6 1023C>T (*17)			
		Units:			
	32904	2D6 1707TDEL (*6)			
		Units:			
	32905	2D6 1758G>T/A (*8/*14)			
		Units:			
	32906	2D6 1846G>A (*4)			
		Units:			
	32907	2D6 2549ADEL (*3)			
		Units:			
	32908	2D6 2613AGADEL (*9)			
		Units:			

Order Code	Result Code	Title	Checking Normals	Print Normals	Perform Site *
2D6O (Continued...)					
	32909	2D6 2850C>T (*2)			
		Units:			
	32910	2D6 2935A>C (*7)			
		Units:			
	32911	2D6 2988G>A (*41)			
		Units:			
	32912	2D6 Genotype Interpretation			
		Units:			
	32913	2D6 Reviewed by			
		Units:			
	32914	2D6 Phenotype Interpretation			
		Units:			

TEST CODE ALWAYS MESSAGE - [NP0080]

NP0080 Direct polymorphism analysis for -1584C>G, 100C>T, 124G>A, 138insT, 883G>C, 1023C>T, 1707T>del, 1758G>T, 1758G>A, 1846G>A, 2549A>del, 2613delAGA, 2850C>T, 2935A>C, 2988G>A, CYP2D6 gene deletion, and gene duplication is performed following PCR amplification. Direct DNA testing will not detect all the known mutations that result in decreased or inactive CYP2D6. Absence of a detectable gene mutation or polymorphism does not rule out the possibility that a patient has an intermediate or poor metabolizer phenotype. Based on the test sensitivity and currently available CYP2D6 polymorphism carrier frequencies, persons of Caucasian descent who tested negative for the above polymorphisms would be estimated to have a less than 1.4 percent residual risk for carrying one or more copies of an undetected poor metabolizer allele. This residual risk may be higher or lower in other ethnic groups. The frequency of polymorphisms causing poor metabolism is highest in the Caucasian population and lower in African Americans and Asians. Patients with an extensive (normal) or intermediate metabolizer genotype may have CYP2D6 enzyme activity inhibited by a variety of medications, or their metabolites. The following is a partial listing of drugs known to affect CYP2D6 activity as of the date of this report.

Drugs known to increase CYP2D6 activity: Dexamethasone and rifampin. Co-administration of these drugs will increase the rate of excretion of CYP2D6 metabolized drugs, reducing that drug's effectiveness.

Drugs known to decrease CYP2D6 activity: Amiodarone,

BUPROPION, CELECOXIB, CHLOMIPRAMINE, CHLORPHENIRAMINE,

TEST SETUP INFORMATION

ORDER CODE	RESULT CODE	TITLE	CHECKING NORMALS	PRINT NORMALS	PERFORM SITE *
2D6O (CONTINUED...)					

CHLORPROMAZINE, CIMETIDINE, CINACALCET, CITALOPRAM, COCAINE, DEXMEDETOMIDINE, DIPHENHYDRAMINE, DOXEPINE, DULOXETINE, ESCITALOPRAM, FLUOXETINE, HALOPERIDOL, HALOFANTRINE, HYDROXYZINE, INDINAVIR, LEVOMEPROMAZINE, METHADONE, METOCHLOPRAMIDE, MOCLOBEMIDE, PAROXETINE, PERAZINE, PERGOLIDE, PERPHENAZINE, PIMOZIDE, QUINIDINE, RANITIDINE, RITONAVIR, SERTRALINE, TEGASEROD, TERBINAFINE, THIORIDAZINE AND TRICLOPIDINE. CO-ADMINISTRATION WILL DECREASE THE RATE OF METABOLISM OF CYP2D6 METABOLIZED DRUGS, INCREASING THE POSSIBILITY OF TOXICITY.

DRUGS THAT UNDERGO METABOLISM BY CYP2D6: ALPRENOLOL, AMITRIPTYLINE, AMPHETAMINE, ARIPIPRAZOLE, ATOMOXETINE, BUFURADOL, CARVEDILOL, CHLORPHENIRAMINE, CHLORPROMAZINE, CLOMIPRAMINE, CODEINE, DEBRISOQUINE, DESIPRAMINE, DEXTRAMETHORPHAN, DEXFENFLURAMINE, DILTIAZEM, DISOPYRAMIDE, DONEPEZIL, DULOXETINE, ENCAINIDE, FLECAINIDE, FLUOXETINE, FLUVOXAMINE, HALOPERIDOL, ILOPERIDONE, IMIPRAMINE, LABETALOL, LIDOCAINE, METOCLOPRAMIDE, METHOXYAMPHETAMINE, METOPROLOL, MEXILITINE, MINAPRINE, MIRTAZAPINE, NEBIVOLOL, NORTRIPTYLINE, OXYCODONE, ONDANSETRON, PAROXETENE, PERGOLIDE, PERHEXILINE, PERPHENAZINE, PROMETHAZINE, PHENFORMIN, PIMOZIDE, PROPAFENONE, PROPRANOLOL, RISPERIDONE, SPARTEINE, SERTRALINE, TAMOXIFEN, THIORIDAZINE, TEGASEROD, TIMOLOL, TRAMADOL, VENLAFAXINE AND ZUCLOPENTHIXOL. CO-ADMINISTRATION MAY DECREASE THE RATE OF ELIMINATION OF OTHER DRUGS METABOLIZED BY CYP2D6.

TEST CODE ALWAYS MESSAGE - [TZASR]

TZASR ANALYTE SPECIFIC REAGENT. THIS TEST WAS DEVELOPED AND ITS PERFORMANCE CHARACTERISTICS DETERMINED BY MAYO CLINIC. IT HAS NOT BEEN CLEARED OR APPROVED BY THE U.S. FOOD AND DRUG ADMINISTRATION.

*Performing Site Legend

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*** End Of Report ***