MAYO CLINIC
Mayo Medical Laboratories

Laboratory Service Report 1-800-533-1710

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,NAT2	0000181020	46	F	0000181020
Ordering Phys				**DOB** 06/10/1966
Client Order # 0000181020	**Account Information**			**Report Notes**
Collected 03/15/2013 04:06	C7028846-DLMP Rochester 3050 Superior Drive Rochester, MN 55901			
Printed 07/01/2013 11:32				

Test	Flag	Results	Unit	Reference Value	Perform Site*
NAT2, Full Gene Sequence					
RECEIVED: 03/15/2013 04:06 **REPORTED:** 07/01/2013 11:27					
NAT2, Full Gene Sequence					
NAT2 Full Gene Interpretation					MCR
Rapid acetylator. This individual has two copies of the gene encoding enzyme with rapid acetylator activity. This genotype is associated with the rapid acetylator phenotype. The polymorphisms found in NAT2 can be combined in several ways to produce between one and four possible haplotypes. The SNPs found in this patient are consistent with the following haplotype(s): Bi-directional DNA sequencing is utilized to detect polymorphisms and other alterations in the NAT2 gene which is amplified by the polymerase chain reaction. A number of drugs are acetylated by NAT2 including: caffeine, caspofungin, dapsone, hydralazine, isoniazid, nitrazepam, procainamide, sulfonamides, including sulfadiazine, sulfamethazine, sulfapyridine, and sulfasalazine, zonisamide. The NAT2 slow acetylator phenotype is associated with increased frequency of adverse drug reactions in some studies with several of these drugs (i.e. dapsone, isoniazid, sulfasalazine). Monitoring and some caution should be exercised when treating patients who are NAT2 slow acetylators. Drug concentrations should be verified in plasma or serum to be in the therapeutic ranges if dosing is changed. Acetaminophen inhibits NAT2 enzymatic activity and should be used cautiously when treating slow acetylators who are receiving the drugs listed above. Laboratory developed test.					
Haplotype 1		4/4			MCR
111T>C		T/T			MCR
190C>T		C/C			MCR
191G>A		G/G			MCR
282C>T		C/C			MCR
341T>C		T/T			MCR
364G>A		G/G			MCR
411T>A		A/A			MCR
434A>C		A/A			MCR
481C>T		C/C			MCR
499G>A		G/G			MCR
590G>A		G/G			MCR
759C>T		C/C			MCR

Performing Site Legend on Last Page of Report

* Report times for Mayo performed tests are CST/CDT

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Test	Flag	Results	Unit	Reference Value	Perform Site*
803A>G		A/A			MCR
845A>C		A/A			MCR
857G>A		G/G			MCR
859T>C/del		T/T			MCR
Reviewed By		Jennifer Herman			MCR
NAT2, Gene Sequencing		Performed			MCR

* Performing Site:

MCR	Mayo Clinic Laboratories - Rochester Main Campus 200 First St SW Rochester, MN 55905	Lab Director: Franklin R. Cockerill, III, M.D.

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