MAYO
Mayo Medical Laboratories
1-800-533-1710

NEW TEST ANNOUNCEMENT
NOTIFICATION DATE: November 26, 2013
EFFECTIVE DATE: December 3, 2013

KRAS, FULL GENE SEQUENCE, BLOOD
Test ID: KRASB

USEFUL FOR: Aiding in the diagnosis of *KRAS*-associated Noonan syndrome, Costello syndrome, cardiofaciocutaneous syndrome.

GENETICS INFORMATION: This test aids in the diagnosis of *KRAS*-associated Noonan syndrome, cardiofaciocutaneous syndrome, Costello syndrome, and clinically related disorders.

PROFILE INFORMATION:

Test ID	Reporting Name	Available Separately	Always Performed
KRASF	KRAS, Full Gene Sequence	No	Yes

METHODOLOGY: Polymerase Chain Reaction (PCR) Followed by DNA Sequence Analysis

REFERENCE VALUES: An interpretive report will be provided.

SPECIMEN REQUIREMENTS:
Multiple gene sequencing tests can be performed on a single specimen after a single extraction. See Multiple Cardiovascular-Related Gene Sequencing Tests in Special Instructions for a list of tests that can be ordered together.

Container/Tube: Lavender top (EDTA)
Specimen Volume: 3 mL
Collection Instructions: Send specimen in original tube.
Additional Information:

1. Include physician's name and phone number with the specimen.
2. Transfusions will interfere with testing for up to 4 to 6 weeks. DNA obtained from white cells may not provide useful information for patients who received a recent transfusion of blood that was not leukocyte reduced. Wait 4 to 6 weeks until transfused cells have left the patient's circulation before drawing the patient's blood specimen for genotype testing.

Forms:

1. Required for all orders: Noonan Spectrum Gene Testing Patient Information Sheet (Supply T689) in Special Instructions
2. New York Clients-Informed consent is required. Please document on the request form or electronic order that a copy is on file. An Informed Consent for Genetic Testing (Supply T576) is available in Special Instructions.

Minimum Volume: 0.5 mL

SPECIMEN STABILITY INFORMATION:

Specimen Type	Temperature	Time
Whole Blood EDTA	Ambient (preferred)	
	Refrigerated	

CAUTIONS:

- Related genetic tests available include testing for a specific familial mutation (KRASK / *KRAS* Gene, Known Mutation, Blood).
- Absence of a mutation does not preclude the diagnosis of Noonan syndrome or another *KRAS*-related disorder unless a specific mutation has already been identified in an affected family member.
- This method will not detect mutations that occur in the introns (except in the splicing regions) and regulatory regions of the gene and large rearrangement-type mutations.
- Sometimes a genetic alteration of unknown significance may be identified. In this case, testing of appropriate family members may be useful to determine pathogenicity of the alteration

CPT CODE:

81405-*KRAS* (v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog)(eg, Noonan syndrome), full gene sequence

DAY(S) SET UP: varies

ANALYTIC TIME: 7 days

QUESTIONS: Contact your Mayo Medical Laboratories' Regional Manager or
Shirley Pokorski, MML Laboratory Technologist Resource Coordinator
Telephone: 800-533-1710