Test Definition: PPAP

Parental Sample Prep for Prenatal Microarray Testing, Blood

Overview

Useful For

Preparing parental blood specimen for possible confirmation testing if an abnormality is detected on the prenatal array sample

DNA extraction of the maternal blood specimen used for maternal cell contamination testing

Testing Algorithm

This test contains no charge and serves as a way to correlate proband and parental specimens. If additional testing is warranted, the appropriate tests will be added.

When CMAP / Chromosomal Microarray, Prenatal, Amniotic Fluid/Chorionic Villus Sampling; CMAPC / Chromosomal Microarray, Autopsy, Products of Conception, or Stillbirth; or CMAMT / Chromosomal Microarray, Autopsy/Products of Conception/Stillbirth, Tissue is ordered, parental blood specimens are collected and prepared for confirmation studies should an abnormality be detected on the prenatal sample. If an abnormality is detected on the fetal specimen, the most appropriate testing (microarray, fluorescence in situ hybridization, or chromosome analysis) to aid in the interpretation of the prenatal result can be performed on the parental specimens. A paternal blood specimen is requested but not required. Maternal cell contamination testing will be performed on the maternal blood and prenatal specimens to rule out the presence of maternal cells in the fetal sample.

If this test is ordered in conjunction with a molecular test and no other cytogenetics testing is ordered, the test will be changed to MATCC / Maternal Cell Contamination, Molecular Analysis, Varies. If both CMAP / Chromosomal Microarray, Prenatal, Amniotic Fluid/Chorionic Villus Sampling or CMAPC / Chromosomal Microarray, Autopsy, Products of Conception, or Stillbirth, and other molecular testing is ordered, MATCC will be added, per laboratory protocol.

Method Name

DNA Extraction/Cell Culture

NY State Available

Yes

Specimen

Specimen Type

Whole blood

Additional Testing Requirements

This test **must be** ordered in conjunction with CMAP / Chromosomal Microarray, Prenatal, Amniotic Fluid/Chorionic Villus Sampling; CMAPC / Chromosomal Microarray, Autopsy, Products of Conception, or Stillbirth, Varies; or CMAMT /

Chromosomal Microarray, Autopsy/Products of Conception/Stillbirth, Tissue. Each parent should have a specimen collected for this test ID using a different order number than the fetal specimen collected for the CMAP, CMAPC, or CMAMT order.

Necessary Information

1. The reason for testing is required.

2. Include the name listed on the prenatal specimen that was submitted for CMAP / Chromosomal Microarray, Prenatal, Amniotic Fluid/Chorionic Villus Sampling; CMAPC / Chromosomal Microarray, Autopsy, Products of Conception, or Stillbirth, Varies; or CMAMT / Chromosomal Microarray, Autopsy/Products of Conception/Stillbirth, Tissue.

Specimen Required

This test requires 2 blood specimens: 1 sodium heparin and 1 EDTA

Specimen Type: Whole blood
Container/Tube: Green top (sodium heparin) **and** lavender top (EDTA)
Specimen Volume: 3 mL EDTA **and** 4 mL sodium heparin
Collection Instructions:
1. Invert several times to mix blood.
2. Send whole blood specimens in original tubes. **Do not aliquot.**

Specimen Minimum Volume

2 mL EDTA and 2 mL sodium heparin whole blood

Reject Due To

All specimens will be evaluated at Mayo Clinic Laboratories for test suitability.

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Whole blood	Ambient (preferred)		
	Refrigerated		

Clinical & Interpretive

Clinical Information

In order to interpret equivocal array results on a prenatal sample (amniotic fluid or chorionic villus), parental studies are performed to determine if the abnormality detected on the prenatal array is inherited or de novo.

Maternal cell contamination testing is performed on the maternal blood and prenatal specimen to detect the presence of maternal cells in the fetal sample.

Reference Values

An interpretive report will be provided.

Interpretation
No interpretation will be provided. This test is for specimen processing only.

Cautions
No significant cautionary statements

Performance

Method Description
The heparinized sample will be cultured following standard laboratory protocols and a fixed-cell pellet will be prepared. DNA will be extracted from the EDTA sample and used to perform maternal cell contamination testing on the maternal sample. The fixed cell pellet and DNA will be stored in the laboratory for possible confirmation testing if an abnormality is detected on the prenatal array sample.(Unpublished Mayo method)

PDF Report
No

Day(s) Performed
Monday through Sunday

Report Available
Varies

Specimen Retention Time
4 weeks

Performing Laboratory Location
Mayo Clinic Laboratories - Rochester Main Campus

Fees & Codes

Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact Customer Service.

Test Classification
Not Applicable

CPT Code Information

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This test ID contains no charge and serves as a way to correlate proband parental specimens. If additional testing is warranted, the appropriate tests will be added.

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
PPAP	Parental Prenatal Array Prep Test	In Process

Result ID	Test Result Name	Result LOINC® Value
55079	Result Summary	50397-9
52978	Interpretation	69965-2
52979	Reason For Referral	42349-1
53337	Specimen	31208-2
53338	Source	31208-2
53339	Method	85069-3