

---

**Reporting Title:** First Trimester Maternal Screen**Performing Location:** Rochester**Ordering Guidance:**

This test does not screen for neural tube defects. If risk assessment for neural tube defects is desired, collect specimen between 15 weeks, 0 days and 22 weeks, 6 days of gestation for an alpha-fetoprotein single marker screen; order MAFP1 / Alpha-Fetoprotein (AFP), Single Marker Screen, Maternal, Serum.

QUAD screening (QUAD1 / Quad Screen [Second Trimester] Maternal, Serum) is not recommended following first-trimester screening.

**Necessary Information:**

Approval to send specimen for first-trimester screening is required and may take up to 5 business days to complete. Nuchal translucency (NT) measurements are only accepted from NT-certified sonographers. Do not send specimen to Mayo Clinic Laboratories if the sonographer is not NT-certified or before completing the application process. See Maternal Screening: Sonographer Approval Process link or complete the NT/CRL Data for First Trimester/Sequential Maternal Screening.

**Specimen Requirements:**

Collection Container/Tube:

Preferred: Serum gel

Acceptable: Red top

Submission Container/Tube: Plastic vial

Specimen Volume: 1 mL

Collection Instructions: Centrifuge and aliquot serum into plastic vial within 2 hours of collection

Additional Information:

1. Blood draw and ultrasound must be completed between 10 weeks, 0 days and 13 weeks, 6 days of gestation, which corresponds to a crown-rump length (CRL) range of 31 to 80 mm.
2. Initial or repeat testing is determined in the laboratory at the time of report and will be reported accordingly. To be considered a repeat test for the patient, the testing must be within the same pregnancy and trimester, with interpretable results for the same test and both tests are performed at Mayo Clinic.

**Specimen Minimum Volume:**

0.75 mL

**Forms:**

First Trimester/Sequential Maternal Screening Patient Information (T593) is required.

Specimen Type	Temperature	Time	Special Container
Serum	Refrigerated (preferred)	7 days	
	Frozen	90 days	
	Ambient	7 days	

## Ask at Order Entry (AOE) Questions:

Test ID	Question ID	Description	Type	Reportable
1STT1	DRPH1	Physician Phone Number	Plain Text	Yes
1STT1	MTWT	Patient Weight	Plain Text	No
1STT1	LBKGS	Units (lbs or kg): • lbs • kg	Answer List	No
1STT1	SONON	Sonographer Name	Plain Text	Yes
1STT1	SONOC	Sonographer Code	Plain Text	Yes
1STT1	DT3	Scan Date	Plain Text	Yes
1STT1	CRL1	CRL	Plain Text	Yes
1STT1	NT_	NT	Plain Text	Yes
1STT1	NUMF	Number of Fetuses: • 1 • 2 • 3 or more	Answer List	Yes
1STT1	CHOR	Number of Chorions: • Monochorionic • Dichorionic • Unknown • Not applicable	Answer List	Yes
1STT1	CRL2	CRL Twin	Plain Text	Yes
1STT1	NT_B	NT Twin	Plain Text	Yes
1STT1	IDD_	Insulin dependent diabetes: • None • Diabetic	Answer List	Yes
1STT1	B_RCE	Patient Race: • Black • non-Black	Answer List	Yes
1STT1	IVF	IVF: • No • Yes	Answer List	Yes

Test ID	Question ID	Description	Type	Reportable
1STT1	EGGDN	IVF Egg Donor Date of Birth	Plain Text	No
1STT1	EGGFZ	IVF Egg or Embryo Freeze Date	Plain Text	No
1STT1	PRHX	Prev Down (T21) / Trisomy Pregnancy: <ul style="list-style-type: none"> <li>• No</li> <li>• Yes</li> <li>• Unknown</li> <li>• If MAFP- Not applicable</li> </ul>	Answer List	Yes
1STT1	SMKN1	Current cigarette smoking status: <ul style="list-style-type: none"> <li>• Non-smoker</li> <li>• Smoker</li> </ul>	Answer List	Yes
1STT1	INTL1	Initial or repeat testing: <ul style="list-style-type: none"> <li>• Initial</li> <li>• Repeat</li> </ul>	Answer List	Yes
1STT1	SONOD	Sonographer reviewer ID	Plain Text	Yes

## Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
26428	Recalculated Maternal Serum Screen	Alphanumeric		43995-0
601798	Results Summary	Alphanumeric		50679-0
26434	Down Syndrome Screen Risk Estimate	Alphanumeric		43995-0
26435	Down Syndrome Maternal Age Risk	Alphanumeric		49090-4
26436	Trisomy 18 Screen Risk Estimate	Alphanumeric		43994-3
26426	PAPP-A	Alphanumeric		48407-1
601515	PAPP-A MoM	Numeric	MoM	76348-2
26427	THCG	Alphanumeric	IU/mL	32166-1
601516	THCG MoM	Numeric	MoM	32166-1
NT_	NT	Numeric	mm	49035-9
601517	NT MoM	Numeric	MoM	49035-9
NT_B	NT Twin	Numeric	mm	49035-9
601518	NT Twin MoM	Numeric	MoM	49035-9
26437	Interpretation	Alphanumeric		49588-7
26439	Recommended Follow Up	Alphanumeric		80615-8
26438	Additional Comments	Alphanumeric		48767-8

Result ID	Reporting Name	Type	Unit	LOINC®
26411	Specimen Collection Date	Alphanumeric		33882-2
26412	Maternal Date of Birth	Alphanumeric		21112-8
26429	Calculated Age at EDD	Alphanumeric	yr	43993-5
26413	Maternal Weight	Numeric	lbs	29463-7
26880	Maternal Weight	Numeric	kg	29463-7
IDD_	Insulin dependent diabetes	Alphanumeric		44877-9
B_RCE	Patient Race	Alphanumeric		21484-1
SMKN1	Current cigarette smoking status	Alphanumeric		64234-8
DT3	Scan Date	Alphanumeric		34970-4
CRL1	CRL	Alphanumeric	mm	11957-8
CRL2	CRL Twin	Alphanumeric	mm	11957-8
26430	GA on Collection by U/S Scan	Alphanumeric	wk,d	11888-5
NUMF	Number of Fetuses	Alphanumeric		55281-0
CHOR	Number of Chorions	Alphanumeric		92568-5
IVF	IVF	Alphanumeric		47224-1
PRHX	Prev Down (T21) / Trisomy Pregnancy	Alphanumeric		53826-4
INTL1	Initial or repeat testing	Alphanumeric		86955-2
SONON	Sonographer Name	Alphanumeric		49088-8
SONOC	Sonographer Code	Alphanumeric		No LOINC Needed
SONOD	Sonographer Reviewer ID	Alphanumeric		49089-6
DRPH1	Physician Phone Number	Alphanumeric		68340-9
10358	GENERAL TEST INFORMATION Also used by tests: QUAD1, MAFP1	Alphanumeric		62364-5

LOINC and CPT codes are provided by the performing laboratory.

## Supplemental Report:

No

## CPT Code Information:

81508

---

**Reference Values:****DOWN SYNDROME**

Calculated screen risks  $<1/230$  are reported as screen negative.

Risks  $\geq 1/230$  are reported as screen positive.

**TRISOMY 18**

Calculated screen risks  $<1/100$  are reported as screen negative.

Risks  $\geq 1/100$  are reported as screen positive. A numeric risk for trisomy 18 risk is provided with positive results on non-diabetic, non-twin pregnancies.

An interpretive report will be provided.