

# ARUP First and Second Trimester Maternal Serum Screening Options

	First Trimester Only	Serum Integrated (Without NT)	Full Integrated (With NT)	Sequential Screen	Quad	Maternal Serum Screening, AFP
<b>ARUP test information</b>	Maternal Serum Screen, First Trimester, hCG, PAPP-A, NT (3000145)	Maternal Serum Screening, Integrated, Specimen #1, PAPP-A, NT (3000147) Maternal Serum Screening, Integrated, Specimen #2, Alpha Fetoprotein, hCG, Estriol, and Inhibin A (3000149)	Maternal Screening, Sequential, Specimen #1, hCG, PAPP-A, NT (3000146) Maternal Screening, Sequential, Specimen #2, Alpha Fetoprotein, hCG, Estriol, and Inhibin A (3000148)	Maternal Serum Screen, Alpha Fetoprotein, hCG, Estriol, and Inhibin A (Quad) (3000143)	Maternal Serum Screening, Alpha Fetoprotein (3000144)	
<b>Sample(s) collected</b>	First trimester	First trimester and second trimester	First trimester and second trimester	First trimester and second trimester	Second trimester	Second trimester
<b>First-trimester measurements</b>	US: CRL, NT Blood: PAPP-A, total hCG	US: CRL (optional) Blood: PAPP-A	US: CRL, NT Blood: PAPP-A	US: CRL, NT Blood: PAPP-A, hCG	N/A	N/A
<b>Gestational age</b>	Blood: 43–83.9 mm (11w0d–13w6d) NT: 38–83.9 mm (10w3d–13w6d)	32.4–83.9 mm 10w0d–13w6d (by US or LMP)	Blood: 32.4–83.9 mm 10w0d–13w6d NT: 38–83.9 mm (10w3d–13w6d)	Blood: 43–83.9 mm (11w0d–13w6d) NT: 38–83.9 mm (10w3d–13w6d)	N/A	N/A
<b>Second-trimester measurements</b>	N/A	AFP, hCG, uE3, DIA	AFP, hCG, uE3, DIA	AFP, hCG, uE3, DIA	AFP, hCG, uE3, DIA	AFP
<b>Gestational age</b>	N/A	15w0d–24w6d (by previous CRL or LMP)	15w0d–24w6d (by previous CRL)	15w0d–24w6d (by previous CRL)	14w0d–24w6d	14w0d–24w6d
<b>Down syndrome</b>						
<b>Detection rate</b>	85%	85%	87%	86% (63% at first draw; 23% at second draw)	81%	N/A
<b>False-positive rate</b>	6%	3–4%	1%	1.6% (0.6% at first draw; 1% at second draw)	4–5%	N/A
<b>Trisomy 18</b>						
<b>Detection rate</b>	~80%	90%	90%	90%	~80%	N/A
<b>False-positive rate</b>	<1%	0.01%	0.01%	0.01%	0.05%	N/A
<b>Open NTDs</b>						
<b>Detection rate</b>	N/A	80%	80%	80%	80%	80%
<b>False-positive rate</b>	N/A	1–2%	1–2%	1–2%	1–2%	1–2%
<b>Results reported</b>	First trimester	Second trimester	Second trimester	Both first and second trimesters	Second trimester	Second trimester

AFP, alpha-fetoprotein; CRL, crown-rump length; DIA, dimeric inhibin A; hCG, human chorionic gonadotropin; LMP, last menstrual period; N/A, not applicable; NT, nuchal translucency; NTDs, neural tube defects; PAPP-A, pregnancy-associated plasma protein A; uE3, unconjugated estriol; US, ultrasound