

TECHNICAL BULLETIN

☐ NEW TEST ☒ TEST CHANGE

NOTIFICATION DATE: 11/04/2025

EFFECTIVE DATE: 11/10/2025

AF-AFP w/Reflex to AChE (AFAFP)

On the effective date, Northwell Health Laboratories will expand the gestational age range for Amniotic Fluid AFP (AFAFP) testing from 15w0d-21w6d to **15w0d-24w6d**. This expanded range will accommodate late GA amniocentesis procedures. The test is still performed in-house using ThermoFisher BRAHMS Kryptor Gold Immunoanalyzers based on TRACE (Time-Resolved Amplified Cryptate Emission) technology.

Amniotic Fluid AFP in conjunction with acetylcholinesterase (AChE) is used as an aid in the diagnosis of Open Neural Tube Defects (ONTD'S) such as Open Spina Bifida (OSB) and Anencephaly. When AChE testing is performed on all amniotic fluid specimens that have an AFP level of 2.0 MoM or greater and are free of fetal blood contamination, the detection rate for OSB is 97% with a false-positive rate of 0.1%. The detection rate for anencephaly using this algorithm is even higher. AFAFP may also detect approximately 60% of Ventral Wall Defects (VWD).

Test Requirement/Parameters	AF-AFP w/ Reflex to AChE (New)	AF-AFP w/ Reflex to AChE (Previous)
Analyte(s):	AFP	AFP
Method:	Time-Resolved Amplified Cryptate Emission (TRACE)	Time-Resolved Amplified Cryptate Emission (TRACE)
Specimen Requirements:	Amniotic Fluid	Amniotic Fluid
Submission Container/Tube:	Sterile Screw Capped Tube	Sterile Screw Capped Tube
Specimen Volume/Minimum Volume:	3ml (2 ml min)	3ml (2 ml min)
Gestational Age Range:	15w0d – 24w6d 16w0d – 18w6d (optimal)	15w0d – 21w6d 16w0d – 18w6d (optimal)
Collection Instructions:	Avoid contamination of amniotic fluid with maternal or fetal blood. No other special preparation is required. Refrigerate prior to shipping for overnight delivery. Transport at ambient temperature.	Avoid contamination of amniotic fluid with maternal or fetal blood. No other special preparation is required. Refrigerate prior to shipping for overnight delivery. Transport at ambient temperature.
Specimen Stability:	Room temperature 7 days Refrigerated 30 days	Room temperature 7 days Refrigerated 30 days
Reference Range:	AFP Cutoff: 2.0 MoM	AFP Cutoff: 2.0 MoM
Computer Interface Code:	PDM # 235466	PDM # 235466
Test Order:	AF AFP	AF AFP

If you have any questions, please contact Client Services at (800) 472-5757.