

LAB76 Blood Gas, Arterial

BMC, CRH, LFH, OCH, FTT, FOX

Performing Location(s)

BMC, CRH, LFH, OCH, FTT, FOX



Important Note

Note: For CRH and Fox this test code replaces RT85/RT43

Specimen Type

Whole Blood: Arterial, Capillary, Cord (MIBH)

Specimen Tubes for Blood Gases

Specimen Tubes for Blood Gases (ABG/VBG), O₂ Sat, OxyHb, CarboxyHb, MetHb



LITHIUM HEPARIN
(LIGHT GREEN OR MINT TOP)



DO NOT SEND SPECIMENS VIA
TUBE SYSTEM- SPECIMENS
WILL BE REJECTED



SODIUM HEPARIN
(DARK GREEN TOP)



Preferred Container

Lithium Heparin coated syringe

Lithium Heparin Tube

Expel all air bubbles from syringe immediately after collection.

Alternate Container

Mint Green top tube (prefer Dark Green top tube short 4.0mL draw Lithium Heparin only when submitted to the Clinical Lab for Blood Gas or with lactate and/or with Basic Metabolic Panel unspun.

Volume Required

2 ml whole blood

Minimum Volume

0.5 ml

Specimen Transport

Deliver ASAP within 15 minutes.

Do not centrifuge.

Stable 30 minutes at room temperature.

Do not send on ice

Do Not send through the pneumatic tube system.

Causes for Rejection

Mislabeled or unlabeled specimen

Less than 95% draw for vacutainer tubes

Specimen not received within 30 min of collection at room temp Specimen delivered on ICE

Specimen contaminated with Room Air (bubbles in syringe or uncapped), Clotted or Centrifuged

Pneumatic tube transport of Green top tubes or syringes

All other tubes or anticoagulant other than Lithium heparin whole blood No Add-ons

Reference Values

Analyte	Reference Ranges		
	Units	Population	Arterial
pH	(none)	All	7.350-7.450
pCO₂	mmHg	All	32-48
pO₂	mmHg	All	83-108
HCO₃	mmol/L	All	21-28
TCO₂	mmol/L	All	19-32
O₂ Content	vol%	All	15-23
O₂ Saturation	%	All	95-98
Base Excess	mmol/L	All	(-2)-(+3)

Critical Values				
Analyte	Units	Population	Arterial/ Capillary Low	Arterial/ Capillary High
pH	(none)	All	< 7.25	>7.60
pCO₂	mmHg	All	< 23	>60
pO₂	mmHg	All	< 45	

Available STAT

Yes

Methodology

Ion specific electrodes, spectrophotometry, calculations

CPT Code

82803