

Test Definition: RBCME

Red Blood Cell Membrane Evaluation, Blood

Reporting Title: RBC Membrane Evaluation, B

Performing Location: Rochester

Shipping Instructions:

Specimens must arrive within 72 hours of collection.

Necessary Information:

Include recent transfusion information and most recent complete blood cell count results.

Metabolic Hematology Patient Information (T810) is strongly recommended, but not required, to be filled out and sent with the specimen. This information aids in providing a more thorough interpretation of test results. Ordering providers are strongly encouraged to complete the form and send it with the specimen.

Specimen Requirements:

A whole blood EDTA specimen, an EDTA shipping control specimen, and 2 well-made peripheral blood smears (Wright stained or fixed in absolute methanol) are required for testing. The shipping control is used to evaluate whether a patient result has been compromised by handling conditions such as temperature, motion, or other transportation interferences. Temperature and handling extremes can adversely impact the integrity of the specimen.

Patient:

Specimen Type: Whole blood

Container/Tube: Lavender top (EDTA)

Specimen Volume: 4 mL Collection Instructions:

- 1. Refrigerate specimen immediately after collection.
- 2. Send whole blood specimen in original tube. Do not aliquot.
- 3. Rubber band patient specimen and control vial together.

Patient:

Specimen Type: Slides

Container/Tube: Blood smears

Specimen Volume: 2 Well-made peripheral blood smears

Collection Instructions:

- 1. Prepare 2 peripheral blood smears from the EDTA tube collected from the patient.
- 2. Either stain the smear with Wright stain or fix the smear with absolute methanol prior to shipping.

Normal Shipping Control:

Specimen Type: Whole blood

Container/Tube: Lavender top (EDTA)

Specimen Volume: 4 mL Collection Instructions:

- 1. Collect a shipping control specimen from a normal (healthy), unrelated, nonsmoking person at the same time as the patient.
- 2. Clearly hand write "normal control" on the outermost label.
- 3. Refrigerate specimen immediately after collection.



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- 4. Send control specimen in original tube. Do not aliquot.
- 5. Rubber band patient specimen and control vial together. The control and patient specimens must be handled in the same manner from specimen collection to receipt in the testing laboratory.

Specimen Minimum Volume:

Patient whole blood, shipping control: 2 mL; Slides: See Specimen Required

Forms:

- 1. Metabolic Hematology Patient Information (T810)
- 2. If not ordering electronically, complete, print, and send a Benign Hematology Test Request (T755) with the specimen.

Specimen Type	Temperature	Time	Special Container
Control	Refrigerated	72 hours	PURPLE OR PINK TOP/EDTA
Whole Blood EDTA	Refrigerated	72 hours	
Whole Blood Slide	Refrigerated		CARTRIDGE

Result Codes:

Result ID	Reporting Name	Туре	Unit	LOINC®
9064	Osmotic Fragility, RBC	Numeric		34964-7
	Also used by tests: FRAGO			
3306	Osmotic Fragility, 0.50 g/dL NaCl	Numeric	%hemol	23915-2
	Also used by tests: FRAGO			
3307	Osmotic Fragility, 0.60 g/dL NaCl	Numeric	%hemol	23918-6
	Also used by tests: FRAGO			
3308	Osmotic Fragility, 0.65 g/dL NaCl	Numeric	%hemol	23920-2
	Also used by tests: FRAGO			
3309	Osmotic Fragility, 0.75 g/dL NaCl	Numeric	%hemol	23921-0
	Also used by tests: FRAGO			
3310	Osmotic Fragility Comment	Alphanumeric		59466-3
	Also used by tests: FRAGO			
SCTRL	Shipping Control Vial	Alphanumeric		40431-9



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Result ID	Reporting Name	Туре	Unit	LOINC®
13065	Spherocytosis Interpretation	Alphanumeric		50595-8
37436	Reviewed By	Alphanumeric		18771-6
83141	Band 3 Fluorescence Staining, RBC	Alphanumeric		98906-1
37406	Peripheral Blood Smear Review	Alphanumeric		59465-5

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

Components:

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
FRAGO	Osmotic Fragility			Yes	Yes (Order FRAG)
SCTRL	Shipping Control Vial			Yes	No
HSEV	Spherocytosis Interpretation			Yes	No
BND3	Band 3 Fluorescence Staining, RBC			Yes	No
SMPB	Peripheral Blood Smear Review			Yes	No

CPT Code Information:

85557-Osmotic fragility 88184-Flow cytometry; first cell surface, cytoplasmic or nuclear marker x 1 85060-Morphology review

Reference Values:

> or =12 months:

0.50 g/dL NaCl (unincubated): 3-53% hemolysis 0.60 g/dL NaCl (incubated): 14-74% hemolysis 0.65 g/dL NaCl (incubated): 4-40% hemolysis 0.75 g/dL NaCl (incubated): 1-11% hemolysis

NaCl = sodium chloride

An interpretive report will be provided.

Reference values have not been established for patients who are younger than 12 months of age.