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**Reporting Title:** SCA 1,2,3,6, or 7 Repeat Analysis**Performing Location:** Mayo Clinic Laboratories - Rochester Main Campus**Ordering Guidance:**

This test is **not a gene panel** for all types of spinocerebellar ataxia (SCA). If individual findings are not specific for one type of SCA, panel analysis is available and includes testing for SCA1, 2, 3, 6, and 7; order SCAP / Spinocerebellar Ataxia Repeat Expansion Panel, Varies.

This test and SCAP should not be ordered concurrently.

**Shipping Instructions:**

Specimen preferred to arrive within 96 hours of collection.

**Necessary Information:**

**The type of spinocerebellar ataxia (SCA) to be assessed (SCA1, 2, 3, 6, or 7) is required.** This information must be provided for testing to be performed.

**Specimen Requirements:**

**Patient Preparation:** A previous bone marrow transplant from an allogenic donor will interfere with testing. For instructions for testing patients who have received a bone marrow transplant, call 800-533-1710.

**Submit only 1 of the following specimens:****Specimen Type:** Whole blood**Container/Tube:****Preferred:** Lavender top (EDTA) or yellow top (ACD)**Acceptable:** Any anticoagulant**Specimen Volume:** 3 mL**Collection Instructions:**

1. Invert several times to mix blood.
2. Send whole blood specimen in original tube. **Do not aliquot.**

**Specimen Stability Information:** Ambient (preferred) 4 days/Refrigerated**Prenatal Specimens**

**Due to its complexity, consultation with the laboratory is required for all prenatal testing;** call 800-533-1710 to speak to a genetic counselor.

**Specimen Type:** Amniotic fluid**Container/Tube:** Amniotic fluid container**Specimen Volume:** 20 mL**Specimen Stability Information:** Refrigerated (preferred)/Ambient**Additional information:**

1. [A separate culture charge will be assessed under](#) CULAF / Culture for Genetic Testing, Amniotic Fluid.
2. **All prenatal specimens must be accompanied by a maternal blood specimen; order MATCC / Maternal Cell Contamination, Molecular Analysis, Varies on the maternal specimen.**

**Specimen Type:** Chorionic villi

**Container/Tube:** 15-mL tube containing 15 mL of transport media

**Specimen Volume:** 20 mg

**Specimen Stability Information:** Refrigerated

**Additional Information:**

1. A separate culture charge will be assessed under CULFB / Fibroblast Culture for Biochemical or Molecular Testing.
2. **All prenatal specimens must be accompanied by a maternal blood specimen;** order MATCC / Maternal Cell Contamination, Molecular Analysis, Varies on the maternal specimen.

**Acceptable:**

**Specimen Type:** Confluent cultured cells

**Container/Tube:** T-25 flask

**Specimen Volume:** 2 Full flasks

**Collection Instructions:** Submit confluent cultured cells from another laboratory.

**Specimen Stability Information:** Ambient (preferred)/Refrigerated

**Additional Information:** **All prenatal specimens must be accompanied by a maternal blood specimen;** order MATCC / Maternal Cell Contamination, Molecular Analysis, Varies on the maternal specimen.

**Forms:**

1. **New York Clients-Informed consent is required.** Document on the request form or electronic order that a copy is on file. The following documents are available:

-[Informed Consent for Genetic Testing](#) (T576)

-[Informed Consent for Genetic Testing-Spanish](#) (T826)

2. [Molecular Genetics: Neurology Patient Information](#)

3. If not ordering electronically, complete, print, and send a [Neurology Specialty Testing Client Test Request](#) (T732) with the specimen.

Specimen Type	Temperature	Time	Special Container
Varies	Varies		

**Ask at Order Entry (AOE) Questions:**

Test ID	Question ID	Description	Type	Reportable
SCARA	MG323	Test Code: <ul style="list-style-type: none"> <li>• SCA1</li> <li>• SCA2</li> <li>• SCA3</li> <li>• SCA6</li> <li>• SCA7</li> </ul>	Answer List	Yes

**Result Codes:**

# Test Definition: SCARA

Spinocerebellar Ataxia Type 1, 2, 3, 6, or 7,  
Repeat Expansion Analysis, Varies

Result ID	Reporting Name	Type	Unit	LOINC®
609700	Result Summary	Alphanumeric		21769-5
MG323	Test Code	Alphanumeric		21768-7
609701	Result	Alphanumeric		36911-6
609702	Interpretation	Alphanumeric		69047-9
609703	Reason for Referral	Alphanumeric		42349-1
609704	Specimen	Alphanumeric		31208-2
609705	Source	Alphanumeric		31208-2
609706	Method	Alphanumeric		85069-3
609707	Disclaimer	Alphanumeric		62364-5
609708	Released By	Alphanumeric		18771-6

LOINC® and CPT codes are provided by the performing laboratory.

### Supplemental Report:

No

### CPT Code Information:

- 88233-Fibroblast Culture (if appropriate)
- 88235-Amniotic Fluid Culture (if appropriate)
- 88240-Cryopreservation (if appropriate)
- 81265-Maternal Cell Contamination (if appropriate)
- 81178 (if appropriate)
- 81179 (if appropriate)
- 81180 (if appropriate)
- 81181 (if appropriate)
- 81184 (if appropriate)

### Reflex Tests:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
CULFB	Fibroblast Culture for Genetic Test	1	88233	No	Yes
CULAF	Amniotic Fluid Culture/Genetic Test	1	88235	No	Yes
MATCC	Maternal Cell Contamination, B	1	81265	No	Yes
G204	ATXN1 (SCA 1) Gene Analysis	1	81178	No	No, (Bill Only)
G205	ATXN2 (SCA 2) Gene Analysis	1	81179	No	No, (Bill Only)
G206	ATXN3 (SCA 3) Gene Analysis	1	81180	No	No, (Bill Only)
G207	ATXN7 (SCA 7) Gene Analysis	1	81181	No	No, (Bill Only)
G208	CACNA1A (SCA 6) Gene Analysis	1	81184	No	No, (Bill Only)
_STR1	Comp Analysis using STR (Bill only)	1	81265	No	No, (Bill only)
_STR2	Add'l comp analysis w/STR (Bill Only)	1	81266	No	No, (Bill only)

**Result Codes for Reflex Tests:**

Test ID	Result ID	Reporting Name	Type	Unit	LOINC®
CULAF	52304	Result Summary	Alphanumeric		50397-9
CULAF	52306	Interpretation	Alphanumeric		69965-2
CULAF	52305	Result	Alphanumeric		82939-0
CULAF	CG767	Reason for Referral	Alphanumeric		42349-1
CULAF	52307	Specimen	Alphanumeric		31208-2
CULAF	52308	Source	Alphanumeric		31208-2
CULAF	52309	Method	Alphanumeric		85069-3
CULAF	54641	Additional Information	Alphanumeric		48767-8
CULAF	52310	Released By	Alphanumeric		18771-6
CULFB	52327	Result Summary	Alphanumeric		50397-9
CULFB	52329	Interpretation	Alphanumeric		69965-2
CULFB	52328	Result	Alphanumeric		82939-0
CULFB	CG770	Reason for Referral	Alphanumeric		42349-1
CULFB	CG899	Specimen	Alphanumeric		31208-2
CULFB	52331	Source	Alphanumeric		31208-2
CULFB	52332	Method	Alphanumeric		85069-3
CULFB	54625	Additional Information	Alphanumeric		48767-8
CULFB	52333	Released By	Alphanumeric		18771-6
MATCC	53285	Result Summary	Alphanumeric		50397-9
MATCC	53286	Result	Alphanumeric		40704-9
MATCC	53287	Interpretation	Alphanumeric		69047-9
MATCC	53288	Reason for referral	Alphanumeric		42349-1
MATCC	53289	Specimen	Alphanumeric		31208-2
MATCC	53290	Source	Alphanumeric		31208-2
MATCC	53291	Released By	Alphanumeric		18771-6
MATCC	55150	Method	Alphanumeric		85069-3

**Reference Values:**

**SPINOCEREBELLAR ATAXIA TYPE 1**

Normal alleles: <36 CAG repeats

Normal alleles with CAT interruptions: 36-43 repeats

Intermediate alleles without CAT interruptions: 36-37 repeats

Uncertain significance: 38 repeats

Expanded alleles without CAT interruptions: >38 CAG repeats

Expanded alleles with CAT interruptions: >43 CAG repeats

**SPINOCEREBELLAR ATAXIA TYPE 2**

Normal alleles: <32 repeats

Uncertain significance: 31 homozygous and 32 repeats

Reduced penetrance: 33-34 repeats

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Expanded alleles: >34 repeats

**SPINOCEREBELLAR ATAXIA TYPE 3**

Normal alleles: <45 repeats

Intermediate alleles: 45-59 repeats

Expanded alleles: >59 repeats

**SPINOCEREBELLAR ATAXIA TYPE 6**

Normal alleles: <19 repeats

Intermediate alleles: 19 heterozygous repeats

Uncertain significance: 19 homozygous repeats

Expanded alleles: >19 repeats

**SPINOCEREBELLAR ATAXIA TYPE 7**

Normal alleles: <19 repeats

Uncertain significance: 19-27 repeats

Intermediate alleles: 28-33 repeats

Reduced penetrance: 34-36 repeats

Expanded alleles: >36 repeats

An interpretive report will be provided.