



# Test Definition: SMPU

Monoclonal Protein Screen, 24 Hour, Urine

**Reporting Title:** M-protein Screen, 24 HR, U

**Performing Location:** Mayo Clinic Laboratories - Rochester Superior Drive

**Shipping Instructions:**

Send refrigerated.

**Necessary Information:**

**24-Hour volume (in milliliters) is required.**

**Specimen Requirements:**

**Supplies:** Urine Container, 60 mL (T313)

**Submission Container/Tube:** Plastic, 60-mL urine bottle

**Specimen Volume:** 50 mL

**Collection Instructions:**

1. Collect urine for 24 hours and refrigerate specimen during collection.
2. Aliquot between 30 mL and 50 mL of urine into a plastic, 60-mL urine bottle.

**Additional Information:** See [Urine Preservatives-Collection and Transportation for 24-Hour Urine Specimens](#) for multiple collections.

**Forms:**

[If not ordering electronically, complete, print, and send a Renal Diagnostics Test Request](#) (T830) with the specimen.

**Urine Preservative Collection Options:**

**Preservatives must be added or temperature controls applied within 4 hours of completion of the collection.**

Ambient (no additive)	OK
Refrigerate (no additive)	Preferred
Frozen (no additive)	OK
50% Acetic Acid	No
Boric Acid	No
Diazolidinyl Urea	OK
6M Hydrochloric Acid	No
6M Nitric Acid	No
Sodium Carbonate	No
Toluene	No

Specimen Type	Temperature	Time	Special Container
Urine	Refrigerated (preferred)	14 days	
	Ambient	24 hours	
	Frozen	5 days	

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

Test ID	Question ID	Description	Type	Reportable
PTU3	TM24	Collection Duration	Plain Text	Yes

PTU3	VL92	Urine Volume	Plain Text	Yes
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### Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
617117	M-protein Isotype MS, 24 HR, U	Alphanumeric		In Process
617118	Flag M-protein Isotype MS, 24 HR, U	Alphanumeric		No LOINC Needed
VL92	Urine Volume	Numeric	mL	3167-4
TP6	Total Protein, 24 HR, U	Numeric	mg/24 h	2889-4
TM24	Collection Duration	Numeric	h	13362-9
CONCU	Total Protein Concentration	Numeric	mg/dL	21482-5

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

### Supplemental Report:

No

### Components:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
MPTU	M-protein Mass-Fix, 24 HR, U	1	0077U	Yes	No
PTU3	Protein, Total, 24 HR, U	1	84156	Yes	Yes, (order PTU)

### CPT Code Information:

84156

84166 Electrophoresis, protein (if appropriate)

0077U

### Reflex Tests:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
PEU	Protein Electrophoresis, 24 Hr, U	1	84166	No	No

### Result Codes for Reflex Tests:

Test ID	Result ID	Reporting Name	Type	Unit	LOINC®
PEU	2833	A/G Ratio	Alphanumeric		44294-7
PEU	21446	M spike	Numeric	mg/24 h	42482-0
PEU	22307	M spike	Numeric	mg/24 h	42482-0
PEU	21447	Impression	Alphanumeric		32210-7
PEU	607970	Albumin	Alphanumeric	mg/24 h	6941-9
PEU	607971	Alpha-1 globulin	Alphanumeric	mg/24 h	6794-2
PEU	607972	Alpha-2 globulin	Alphanumeric	mg/24 h	6795-9

PEU	607973	Beta globulin	Alphanumeric	mg/24 h	94714-3
PEU	607974	Gamma globulin	Alphanumeric	mg/24 h	94715-0

**Reference Values:**

PROTEIN, TOTAL

&lt;229 mg/24 hours

Reference values have not been established for patients younger than 18 years.

## ELECTROPHORESIS, PROTEIN

The following fractions, if present, will be reported as mg/24 h:

Albumin

Alpha-1-globulin

Alpha-2-globulin

Beta-globulin

Gamma-globulin

## MASSFIX M-PROTEIN ISOTYPE

M-protein Isotype MS:

No monoclonal protein detected

Flag M-protein Isotype MS:

Negative