

# GROWTH HORMONE SERUM/ PLASMA

## Orderable - GH

Turn Around Time: 5-7 days

### Alternate Name(s):

Human Growth Hormone  
hGH

### Specimen:

Adult	Pediatric
4.5 mL Light Green top Vacutainer tube	0-2 years: 0.5 mL Light Green top Microtainer 2-10 years: 3 mL Light Green top Vacutainer tube
Red, Gold, or Lavender (EDTA) top tubes are also acceptable	

### Collection Information:

Minimum volume of plasma or serum required is 700 µL for adult samples or 200 µL for pediatric samples.

Growth Hormone is only stable for 8 hours at 20-25 °C and 24 hours at 2-8 °C; therefore, sample should be sent ASAP to lab to be aliquoted and frozen.

### Reference Ranges:

Male	
Age	Range
0 – 10 years:	≤ 6.3 µg/L*
11 – 17 years:	≤ 10.8 µg/L*
21 – 77 years:	≤ 2.5 µg/L*

Female	
Age	Range
0 – 10 years:	≤ 7.8 µg/L*
11 – 17 years:	≤ 8.1 µg/L*
21 – 77 years:	≤ 9.9 µg/L*

\*Basal levels of growth hormone do not have diagnostic relevance. Stimulation or



**Laboratory:**  
Core Lab



**Requisition:**  
GENERAL LABORATORY  
REQUISITION



**Method of Analysis:**  
Roche  
Electrochemiluminescence



**Test Schedule:**  
Samples are batched and  
only performed on  
Wednesday afternoon.  
Received samples from  
outside this timeframe  
are aliquoted and frozen.



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suppression tests are needed to diagnose a growth hormone-related disorder.

Children:  $\geq 6 \mu\text{g/L}$  following provocative testing is not consistent with growth hormone deficiency

## Comments:

Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e.  $> 5 \text{ mg/day}$ ) until at least 8 hours after the last biotin administration.

This assay is affected by pegvisomant (a highly selective growth hormone receptor antagonist).

This assay is not suitable for pregnant women due to cross-reactivity with placental growth hormone.

## Storage and Shipment:

Store and ship plasma or serum frozen.