

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-07-19 09:12:53  
 Date of Next Testing: 2028-07-18 09:12:53  
 Product Name: **Heparin sodium**  
 CAS Number: 9041-08-1  
 Specifications & Purity: Moligand™, Anti factor Xa titers 110~210IU/mg  
 Lot #: G2509021  
 SKU #: **H284091**  
 Version: **1**  
 Analysis #: **545644**  
 Storage Temperature: Store at 2-8°C

| Parameter                          | Limit Values              | Result                     |
|------------------------------------|---------------------------|----------------------------|
| (Dry base)Titer of anti XA factor  | 110~210(IU/mg)            | 123.00000 IU/mg OR I.U./mg |
| (Dry base)Titer of anti IIA factor | 35-100(IU/mg)             | 55.00000 IU/mg OR I.U./mg  |
| Molar ratio(SO42-/COOH-)           | ≥1.8                      | 2.34000                    |
| Anti XA factor/anti IIA factor     | 1.9-3.2                   | 2.23400                    |
| pH                                 | 5.5-8                     | 6.96000                    |
| Heavy metals                       | 0-20 (ppm)                | 1.89000 ppm                |
| Total Nitrogen                     | 1.5-2.5 (%)               | 1.50000 %                  |
| Loss on drying                     | 0-5 (%)                   | 0.32000 %                  |
| Sodium(Na)                         | 9.5-12.5 (%)              | 11.89000 %                 |
| Boron(B)                           | 0-1 (ppm)                 | 0.31800 ppm                |
| (Dry base)Ethanol residue          | ≤0.5 (%)                  | 0.01320 %                  |
| Total aerobic bacteria             | ≤10(cfu/g)                | 9.00000 cfu/g              |
| Total number of molds and yeasts   | ≤10(cfu/g)                | 9.00000 cfu/g              |
| nitrite                            | ≤5(ppm)                   | 1.00000 ppm                |
| Appearance (H284091)               | White to off-white powder | White to Off-White Powder  |
| Bacterial endotoxin( < 0.01EU/IU)  | Pass                      | Pass                       |



QualityAssurance@aladdinsci.com

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A handwritten signature in black ink that reads "John Su".

John Su  
QA & QC Manager