

Chemical Shift Validation Report

November 28, 2022 - 2:50pm EST

Entry ID : 51294

Title : Backbone assignment of Hepatitis B virus core protein Cp149 dimer by solution

NMR at pH 7.5

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Deposited on : 2022-01-27

The following versions of software and data were used in the production of this report:

PyNMRSTAR : 3.3.0 RCI : 1.1 ShiftChecker : 1.2

LACS : VARLACSVER AVS : VARAVSVER

1 Summary

The biological assembly is an oligomer with 2 chains made by one Entity.

1.1 Entity information

1.1.1 Entity 1

Type : polymer

 ${\bf Polymer\ type} \qquad : \quad {\bf polypeptide(L)}$

Name : entity_1 Sequence length : 149

Sequence : MDIDPYKEFGATVELLSFLP

SDFFPSVRDLLDTASALYRE
ALESPEHCSPHHTALRQAIL
CWGELMTLATWVGVNLEDPA
SRDLVVSYVNTNMGLKFRQL
LWFHISCLTFGRETVIEYLV
SFGVWIRTPPAYRPPNAPIL

STLPETTVV

1.2 Chemical shift list information

There is 1 chemical shift list reproted. The summary of the chemical shift data is given below

| Saveframe name | assigned_chemical_shifts_1 |
|--------------------------|----------------------------|
| Saveframe ID | 1 |
| Ionic Strength | 0 M |
| PH | 7.5 pH |
| Pressure | 1 atm |
| Temperature | 295 K |
| Number of shifts | 382 |
| Number of shift outliers | 0 |
| Assignment completeness | 18.5% |

2 Completeness

Completeness information for Entity 1. It is a polypeptide(L) polymer. 0 out of 32 methyl groups (LEU and VAL) were assigned stereospecifically.

| | Total | ^{1}H | ^{13}C | ^{15}N |
|----------|-----------------|----------------|-----------------|----------------|
| Backbone | 378/727 (52.0%) | 98/292 (33.6%) | 182/298 (61.1%) | 98/137 (71.5%) |



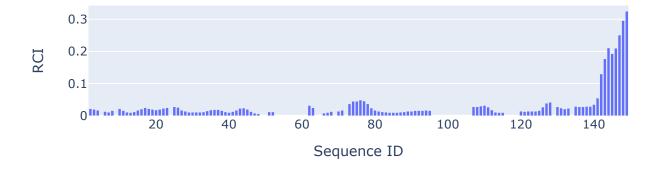
| Sidechain | 0/1129 (0.0%) | 0/761 (0.0%) | 0/352~(0.0%) | 0/32 (0.0%) |
|-----------|------------------|-----------------|-----------------|-----------------|
| Aromatic | 4/210 (1.9%) | 2/109 (1.8%) | 0/93~(0.0%) | 2/12 (16.7%) |
| Overall | 382/2066 (18.5%) | 100/1162 (8.6%) | 182/743 (24.5%) | 100/181 (55.2%) |

3 Statistically unusual chemical shifts

There are no chemical shift outliers.

4 RCI

RCI plot for the chemical shifts from the save frame $assigned_chemical_shifts_1$



5 Order parameter

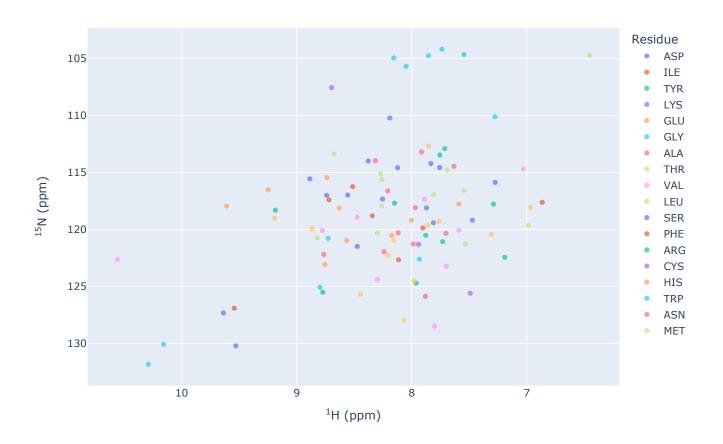
Order parameter plot for the chemical shifts from the save frame $assigned_chemical_shifts_1$





6 Simulated peak positions

Simulated ¹H-¹⁵N HSQC peak positions



7 LACS

Place holder for LACS results

8 Analysis data

place holder for the numerical values and tables.

