OWASP MCP Top 10

Compliance assessment — 2025

Server: bioRxiv-MCP-Server

Slug: biorxiv-mcp-server
Scan id: 00000000-0000-0000-0000-000000000000

Assessed at: 2026-05-24 06:59:30 UTC
Sentinel version: 0.4.0
Rules version: 2026-04-23

? Insufficient evidence

DRAFT for review — not legal advice. See attestation block for verification instructions.

DRAFT

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1. Executive summary

Assessment of bioRxiv-MCP-Server against OWASP MCP Top 10: overall status insufficient evidence. Of 10 controls, 0 met, 0 unmet, 0 partial, 10 not assessed, 0 not applicable. 0 control(s) had complete mapped-assessor execution evidence; 10 lacked sufficient execution evidence and 0 were outside the current assessor mapping. No definitive compliance conclusion is possible because one or more mapped assessor sets did not execute completely. All claims are traceable to individual finding rows via finding_id and to the governing rule via rule_id; the enclosing signed envelope commits MCP Sentinel to the exact bytes of this report.

2. Coverage & transparency

Coverage band: minimal

Coverage ratio: 6%

Rules version: 2026-04-23

Analysis techniques applied:

- composite
- dependency-audit
- similarity
- structural

3. Controls summary

ControlName	Status	Evidence
MCP01Prompt Injection?	Not assessed	0
MCP02Tool Poisoning?	Not assessed	0
MCP03 Command Injection?	Not	

assessed0
MCP04Data Exfiltration? Not assessed0
MCP05 Privilege Escalation? Not assessed0
MCP06 Excessive Permissions? Not assessed0
MCP07 Insecure Configuration ? Not assessed0
MCP08 Dependency Vulnerabilities ? Not assessed0
MCP09 Logging & Monitoring Failures? Not assessed0
MCP10Supply Chain Compromise? Not assessed0

4. Control details

MCP01 — Prompt Injection

? Not assessed

0/24 mapped assessor rule(s) are proven to have executed; no adverse findings were observed, but the control is not assessed because execution evidence is incomplete. Unexecuted assessors: A1 (execution-ledger); A5 (execution-ledger); A7 (execution-ledger); A8 (execution-ledger); A9 (execution-ledger); B5 (execution-ledger); F1 (execution-ledger); F6 (execution-ledger); G1 (execution-ledger); G2 (execution-ledger); G3 (execution-ledger); G4 (execution-ledger); G5 (execution-ledger); H2 (execution-ledger); H3 (execution-ledger); I3 (execution-ledger); I6 (execution-ledger); I7 (execution-ledger); J3 (execution-ledger); J5 (execution-ledger); J6 (execution-ledger); N4 (execution-ledger); N9 (execution-ledger); N12 (execution-ledger).

MCP02 — Tool Poisoning

? Not assessed

0/15 mapped assessor rule(s) are proven to have executed; no adverse findings were observed, but the control is not assessed because execution evidence is incomplete. Unexecuted assessors: A2 (execution-ledger); A4 (execution-ledger); A6 (execution-ledger); F2 (execution-ledger); F5 (execution-ledger); G6 (execution-ledger); I1 (execution-ledger); I2 (execution-ledger); I5 (execution-ledger); I16 (execution-ledger); J5 (execution-ledger); J6 (execution-ledger); K12 (execution-ledger); K13 (execution-ledger); L15 (execution-ledger).

MCP03 — Command Injection

? Not assessed

0/6 mapped assessor rule(s) are proven to have executed; no adverse findings were observed, but the control is not assessed because execution evidence is incomplete. Unexecuted assessors: C1 (execution-ledger); C9 (execution-ledger); C13 (execution-ledger); C16 (execution-ledger); J2 (execution-ledger); J7 (execution-ledger).

MCP04 — Data Exfiltration

? Not assessed

0/15 mapped assessor rule(s) are proven to have executed; no adverse findings were observed, but the control is not assessed because execution evidence is incomplete. Unexecuted assessors: A3 (execution-ledger); F1 (execution-ledger); F3 (execution-ledger); F7 (execution-ledger); G7 (execution-ledger); I9 (execution-ledger); I13 (execution-ledger); K18 (execution-ledger); O4 (execution-ledger); O5 (execution-ledger); O6 (execution-ledger); O8 (execution-ledger); O9 (execution-ledger); O10 (execution-ledger); P3 (execution-ledger).

MCP05 — Privilege Escalation

? Not assessed

0/7 mapped assessor rule(s) are proven to have executed; no adverse findings were observed, but the control is not assessed because execution evidence is incomplete. Unexecuted assessors: C2 (execution-ledger); C8 (execution-ledger); C10 (execution-ledger); C12 (execution-ledger); I4 (execution-ledger); I12 (execution-ledger); J1 (execution-ledger).

MCP06 — Excessive Permissions

? Not assessed

0/7 mapped assessor rule(s) are proven to have executed; no adverse findings were observed, but the control is not assessed because execution evidence is incomplete. Unexecuted assessors: A2 (execution-ledger); B3 (execution-ledger); B7 (execution-ledger); E4 (execution-ledger); F2 (execution-ledger); I11 (execution-ledger); I16 (execution-ledger).

MCP07 — Insecure Configuration

? Not assessed

0/11 mapped assessor rule(s) are proven to have executed; no adverse findings were observed, but the control is not assessed because execution evidence is incomplete. Unexecuted assessors: B6 (execution-ledger); C7 (execution-ledger); C8 (execution-ledger); C11 (execution-ledger); C14 (execution-ledger); C15 (execution-ledger); D6 (execution-ledger); E1 (execution-ledger); E2 (execution-ledger); I15 (execution-ledger); J4 (execution-ledger).

MCP08 — Dependency Vulnerabilities

? Not assessed

0/7 mapped assessor rule(s) are proven to have executed; no adverse findings were observed, but the control is not assessed because execution evidence is incomplete. Unexecuted assessors: D1 (execution-ledger); D2 (execution-ledger); D3 (execution-ledger); D4 (execution-ledger); D5 (execution-ledger); D6 (execution-ledger); D7 (execution-ledger).

MCP09 — Logging & Monitoring Failures

? Not assessed

0/6 mapped assessor rule(s) are proven to have executed; no adverse findings were observed, but the control is not assessed because execution evidence is incomplete. Unexecuted assessors: C6 (execution-ledger); E3 (execution-ledger); K1 (execution-ledger); K2 (execution-ledger); K3 (execution-ledger); K20 (execution-ledger).

MCP10 — Supply Chain Compromise

? Not assessed

0/27 mapped assessor rule(s) are proven to have executed; no adverse findings were observed, but the control is not assessed because execution evidence is incomplete. Unexecuted assessors: A4 (execution-ledger); D3 (execution-ledger); D5 (execution-ledger); D7 (execution-ledger); F5 (execution-ledger); I5 (execution-ledger); J7 (execution-ledger); K9 (execution-ledger); K10 (execution-ledger); K11 (execution-ledger); L1 (execution-ledger); L2 (execution-ledger); L3 (execution-ledger); L4 (execution-ledger); L5 (execution-ledger); L6 (execution-ledger); L7 (execution-ledger); L8 (execution-ledger); L9 (execution-ledger); L10 (execution-ledger); L11 (execution-ledger); L12 (execution-ledger); L13 (execution-ledger);

L14 (execution-ledger); L15 (execution-ledger); Q4 (execution-ledger); Q13 (execution-ledger).

5. Multi-step attack chains

No multi-step attack chains were synthesized for this server.

6. Cryptographic attestation

Algorithm: HMAC-SHA256
Key ID: mcps-hkdf-e8990a4e1526
Signer: mcp-sentinel/v1
Signed at: 2026-05-24T06:59:30.415Z
Canonicalization: RFC8785

HMAC-SHA256 signature (base64, wrapped at 64 chars):

```
ZxZplowbAlMtX6fJw6Su5vQPNeZNr7IcExxUeD2JqZg=
```

Verification instructions:

```
To verify this report:
  1. Extract the report body (everything except the .attestation field).
  2. Canonicalize the body via RFC 8785 (JCS).
  3. Compute HMAC-SHA256 with the signing key for key_id "mcps-hkdf-e8990a4e1526".
  4. Base64-encode the result and compare with the signature above.
```