

Certificate of Blockchain Timestamp Verification

Strain Name: AST 530

Sample Name: AST 530-20241017

Registrant: AST Genetics

Stamped FileName: [RSP13256_blockchain.vcf.gz](#) 

Stamped File SHA-256 Hash: [b470ee308e9fa3fab634f2c0197bed05a74e16691cf9e78575f2af70042857ea](#)

OTS File: [RSP13256_blockchain.vcf.gz.ots](#) 

OTS SHA-256 Hash: [747947ea31a16b8bf7cd5ff65239bcecd6294a5a373e556b1d178fe4f3ef7066](#)

Block	Date	Transaction ID	Merkle Root	Verified	QR
871134	2024-11-20	00000000...83b74d5c	4d630e3c...81ba8b8f	✓	
871147	2024-11-20	00000000...5cf56c16	8adb978b...e62c6165	✓	
871173	2024-11-20	00000000...5177e5cb	54e2cfba...7cf44daa	✓	

Success! Your file is blockchain-stamped

2024-11-20 10:27:56 UTC



OTS File Hex Contents (copy/paste friendly)

```
004f78650e54606d657374616d7073000050726f66600bf99e2e884e892948180b470e308e9fa3fab34f2c0197bed05a74e16691cf9e70575f2af70042857eaf0106cf844100571a252470163be84b5a8c208fffb101db2207296e0f5dbb54188bd38c1dea508f0
20bd976a1ff7cf300d731197093ab41cd2086f6e0b0cf830fd664995375ecf66c000f104673d090ff000eb74c729fbac30e0003dfe30d2ef90c8e292088747470733a2f2f66090e0e0e65792e63016c656e64617220657405720e69747977616c6c2e036fdfff01075
6eba4ea81915c15dec232f0495c0200f120c03661737ed0909306022c631b1e29b564313a0a7f0d562ebd14b0bb710d010d00f104673d0909ef900f407f3967b0cabdd0003dfe30d2ef90c8e2e2d68747470733a2f2f616c6903652e6274632e63616c656e64617220
6f70656e74699d657374616d70732e6f7267fff0107bd3a1fc209da602a2de8c0bdcf5655408f104673d0909ef9004beb3c92449ef86909083dfe30d2ef90c8e232268747470733a2f2f6274632e63616c656e646172206f70656e74699d657374616d70732e6f7267
bc0021def5ae334f7e4c9d6608f104673d0909ef0007ff81c4491a03b7d0083dfe30d2ef90c8e2c2b68747470733a2f2f626f622e6274632e63616c656e646172206f70656e74699d657374616d70732e6f7267
```

What is this?

The OTS file detailed above can be downloaded with the provided link, but in the event that the OTS file is no longer available for download, it can be recreated using the above HEX textblock.

1. Copy/paste this into a text file, e.g., RSP13256_ots.hex
2. Convert this to an .ots file using a webserver:

https://tomeko.net/online_tools/hex_to_file.php

Alternatively, use the command line:

```
xxd -r -p RSP13256_ots.hex > RSP13256_blockchain.vcf.gz.ots
```

Example: Successfully Validated OpenTimestamps file

Using your stamped file and corresponding OTS file, validate at:

<https://opentimestamps.org/#stamp-and-verify>

This stamp verifies the file's existence at a specific point in time. Validation can be done independently of Medicinal Genomics® using open-source tools. The necessary OTS file to perform this validation can be recreated from this PDF. Medicinal Genomics® does not guarantee that the stamped file will be hosted on their servers indefinitely. Therefore, it is strongly recommended that owners download and securely retain their stamped files.

STAMP & VERIFY

↓

RSP13374_blockchain.vcf.gz.upgraded.ots 3.8 kB
Stamped SHA256 hash: cd0b4063920ace783fe9c86fe1a6afab3c75891a55bb3b4601b14d1cc246f272

↓

RSP13374_blockchain.vcf.gz 2.2 GB
SHA256: cd0b4063920ace783fe9c86fe1a6afab3c75891a55bb3b4601b14d1cc246f272

✓ SUCCESS!

Bitcoin block 894096 attests existence as of 2025-04-26 EST

i