

#### **KYC & AUDIT.**

Novos is an agency specializing in blockchain technology solutions, Audits, KYC / Doxx.





# CERTIFICATE OF COMLIANCE

Smart Contract Audit by NOVOS







HulkyInuToken

**Audit Passed** 

July 16, 2022



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# Audit Summary

This report has been prepared for Hulky Inu Token on the Binance Chain network. Novos provides both clientcentered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Ensuring contract logic meets the specifications and intentions of the client without exposing the user's funds to risk.
- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.
- Thorough line-by-line manual review of the entire codebase by industry experts.



# Project Overview

Parameter	Result
Address	0xF066F58520F43523cd4370875f9097aC8b410B12
Name	Hulky Inu
Token Tracker	HINU
Decimals	18
Supply	5,000,000,000,000
Platform	Binance Chain
Compiler	v0.8.4+commit.c7e474f2
Optimization	Yes with 200 runs
LicenseType	MIT license
Language	Solidity
Codebase	https://bscscan.com/address/0xf066f58520f43523cd4370875f9097ac8b410b1 2#code
Url	https://www.hulkyinu.com/

### Main Contract Assessed

Name	Contract	Live
Hulky Inu	0xF066F58520F43523cd4370875f9097aC8b410B12	Yes



### Smart Contract Vulnerability Checks

Vulnerability	Automatic Scan	Manual Scan	Result
<ul> <li>Unencrypted Private Data On-Chain</li> </ul>	✓ Complete	✓ Complete	✓ Low/No Risk
❖ Code With No Effects	✓ Complete	✓ Complete	✓ Low/No Risk
<ul> <li>Message call with hardcoded gas amount</li> </ul>	✓ Complete	✓ Complete	✓ Low/No Risk
Hash Collisions With Multiple Variable Length Arguments	✓ Complete	✓ Complete	✓ Low/No Risk
<ul> <li>Unexpected Ether balance</li> </ul>	✓ Complete	✓ Complete	✓ Low/No Risk
Presence of unused variables	✓ Complete	✓ Complete	✓ Low/No Risk
❖ Right-To-Left-Override control character (U+202E)	✓ Complete	✓ Complete	✓ Low/No Risk
Typographical Error	✓ Complete	✓ Complete	✓ Low/No Risk
Typographical Effor     DoS With Block Gas Limit	✓ Complete	✓ Complete	✓ Low/No Risk
			✓ Low/No Risk
❖ Arbitrary Jump with Function Type Variable	✓ Complete	✓ Complete	
♦ Insufficient Gas Griefing	✓ Complete	✓ Complete	✓ Low/No Risk
❖ Incorrect Inheritance Order	✓ Complete	✓ Complete	✓ Low/No Risk
❖ Write to Arbitrary Storage Location	✓ Complete	✓ Complete	✓ Low/No Risk
Requirement Violation	✓ Complete	✓ Complete	✓ Low/No Risk
Missing Protection against Signature Replay Attacks	✓ Complete	✓ Complete	✓ Low/No Risk
<ul> <li>Weak Sources of Randomness from Chain Attributes</li> </ul>	✓ Complete	✓ Complete	✓ Low/No Risk









### Smart Contract Vulnerability Checks

Vulnerability	Automatic Scan	Manual Scan	Result
<ul> <li>Authorization through tx.origin</li> </ul>	✓ Complete	✓ Complete	✓ Low/No Risk
Delegatecall to Untrusted Callee	✓ Complete	✓ Complete	✓ Low/No Risk
<ul> <li>Use of Deprecated Solidity Functions</li> </ul>	✓ Complete	✓ Complete	✓ Low/No Risk
❖ Assert Violation	✓ Complete	✓ Complete	✓ Low/No Risk
❖ Reentrancy	✓ Complete	✓ Complete	✓ Low/No Risk
<ul> <li>Unprotected SELFDESTRUCT Instruction</li> </ul>	✓ Complete	✓ Complete	√ Low/No Risk
<ul> <li>Unprotected Ether Withdrawal</li> </ul>	✓ Complete	✓ Complete	✓ Low/No Risk
<ul> <li>Unchecked Call Return Value</li> </ul>	✓ Complete	✓ Complete	✓ Low/No Risk
<ul> <li>Outdated Compiler Version</li> </ul>	✓ Complete	✓ Complete	✓ Low/No Risk
<ul> <li>Integer Overflow and Underflow</li> </ul>	✓ Complete	✓ Complete	✓ Low/No Risk
❖ Function Default Visibility	✓ Complete	✓ Complete	✓ Low/No Risk









# Contract Ownership

The contract ownership of Hulky Inu is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

01

The current owner is the address 0x6586b900984b1db08e0cc7a0212445702308d2ee which can be viewed from: HERE

02

The owner wallet has the power to call the functions displayed on the priviliged functions chart below, if the owner wallet is compromised this privileges could be exploited.

03

We recommend the team to renounce ownership at the right timing if possible, or gradually migrate to a timelock with governing functionalities in respect of transparency and safety considerations.



# Important Notes To The Users:

O1 The owner cannot stop trading.

Owner can change the claimWait for dividends between 1 hour and 24 hours.

02 The owner cannot blacklist wallets.

Owner can change the maxWalletBalance with no constrains.

- On sells there is an increase of tax based on the fees, this new tax cannot be higher than 20%.
- Owner can change and configure the dividendTracker with no constrains.

- Owner can enable trading but cannot pause or disable it.
- totalFees =
  tokenRewardsFee.add(liquidityFee).add(market ingFee); require(totalFees <= 25, "Total fee is over 25%");.

os swapTokensAtAmount = totalSupply\_.mul(2).div(10\*\*6); // 0.002%

Owner can add/remove wallets from fee exemption and dividends.

- "BABYTOKEN: The PancakeSwap pair cannot be removed from automatedMarketMakerPairs"
- Owner can change the minimum token balance needed to get dividends. No high-riskExploits /Vulnerabilities Were Found in token Source Code.





### Technical Findings Summary

Classification of Issues

#### **Total**

What you should pay attention to **Total** Medium High Bugs or issues with that may be subject to Medium High Exploits, vulnerabilities or errors that will certainly exploit, though their impact is somewhat or probabilistically lead towards loss of funds, limited. Issues under this classification are Hulky Inu Token? control, or impairment of the contract and its recommended to be fixed as soon as possible. functions. Issues under this classification are recommended to be fixed with utmost urgency Info Low Info Low Consistency, syntax or style best Effects are minimal in isolation and do not pose a practices. Generally pose a negligible significant danger to the project or its users. Issues under this classification are recommended to be fixed level of risk, if any.

nonetheless.



# Findings

Public function that could be declared external



ID	Severity	Contract	Function
01	Informational	Hulky Inu	Functions: size, getKeyAtIndex, getIndexOfKey

#### Description

Gas Optimization. Public function that could be declared external

#### Recommendation

Public functions that are never called by the contract should be declared external to save gas.



# Findings

Missing events arithmetic



ID	Severity	Contract	Function
02	Informational	Hulky Inu	Missing events for setWalletBalance, setMaxBuyTransaction, setMaxSellTransaction, setSwapTokensAtAmount, setSellTransactionMultiplier

#### Description

Functions that change critical arithmetic parameters should emit an event.

#### Recommendation

Emit corresponding events for critical parameter changes.



## Priviliged Functions (onlyOwner & Others)

Function Name	Parameters	Visibility
✓ renounceOwnership	■ none	<ul><li>external</li></ul>
✓ transferOwnership	address newOwner	• public
✓ prepareForPartherOrExchang eListing	<ul> <li>address_partnerOrExchangeAddress</li> </ul>	• external
✓ setWalletBalance	<ul> <li>uint256 _maxWalletBalance</li> </ul>	<ul> <li>external</li> </ul>
✓ setMaxBuyTransaction	■ uint256_maxTxn	■ external
✓ setMaxSellTransaction	■ uint256_maxTxn	<ul> <li>external</li> </ul>
✓ updateBusdDividendToken	<ul> <li>address _newContract</li> </ul>	<ul> <li>external</li> </ul>
✓ updateMarketingWallet	address_newWallet	<ul> <li>external</li> </ul>
✓ setSwapTokensAtAmount	■ uint256_swapAmount	<ul> <li>external</li> </ul>
✓ setSellTransactionMultiplier	■ uint256_multiplier	<ul> <li>external</li> </ul>
✓ setTradingIsEnabled	■ none	<ul> <li>external</li> </ul>
✓ setBusdDividendEnabled	bool_enabled	<ul> <li>external</li> </ul>
✓ setMarketingEnabled	bool_enabled	<ul> <li>external</li> </ul>
✓ setSwapAndLiquifyEnabled	bool_enabled	• external
✓ updatebusdDividendTracker	address newAddress	• external
✓ updateUniswapV2Router	address newAddress	• external



### Priviliged Functions (onlyOwner & Others)

Function Name	Parameters Parameters Parameters	Visibility
✓ excludeFromFees	<ul> <li>address account, bool excluded</li> </ul>	• public
✓ excludeFromDividend	■ address account	• public
✓ setAutomatedMarketMakerP air	<ul> <li>address pair, bool value</li> </ul>	<ul><li>external</li></ul>
✓ updateGasForProcessing	■ uint256 newValue	• external
✓ updateMinimumBalanceForDi vidends	■ uint256 newMinimumBalance	<ul><li>external</li></ul>
✓ updateClaimWait	■ uint256 claimWait	<ul><li>external</li></ul>
✓ processDividendTracker	■ uint256 gas	■ external







Parameter	Result
Pair Address	0xb899c145bad7916649b9a9deb67451b2c830fa5f
HINU Reserves	0.00 HINU
BNB Reserves	0.00 BNB
Liquidity Value	\$0 USD



# моvos Statistics

Token (HINU) Holders Info



Parameter	Result
HINU Percentage Burnt	20%
HINU Amount Burnt	1,000,000,000,000 HINU
Top 10 Percentage Own	100.00%
Top 10 Amount Owned	4,000,000,000,000 HINU
Top 10 Aprox Value	\$NaN USD



# Statistics

LP (HINU/BNB) Holders Info



Parameter	Result
HINU/BNB % Burnt	0.00%
HINU/BNB Amount Burnt	O HINU/BNB
Top 10 Percentage Owned	0.00%
Top 10 Amount Owned	O HINU/BNB
Locked Tokens Percentage	0.00%

- ❖ All the data diplayed above was taken on-chain at block 19549219
- ❖ The tokens on industry-standard burn wallets are not included on the top 10 wallets calculations



# Disclaimer

Novos has conducted an independent audit to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the codes that were provided for the scope of this audit. This audit report does not constitute agreement, acceptance or advocation for the Project that was audited, and users relying on this audit report should not consider this as having any merit for financial advice in any shape, form or nature. The contracts audited do not account for any economic developments that may be pursued by the Project in question, and that the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are completely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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