

# HEXNINJA AUDITS



Security Assessment

**MACHO APE Token**

July 23, 2022

# Table of Contents

## **1 Audit Summary**

## **2 Project Overview**

### 2.1 Token Summary

### 2.2 Main Contract Assessed

## **3 Smart Contract Vulnerability Checks**

### 3.1 Mint Check

### 3.2 Fees Check

### 3.3 MaxTx Check

### 3.4 Pause Trade Check

## **4 Contract Ownership**

## **5 Liquidity Ownership**

## **6 Important Notes To The Users**

## **7 Social Media Check(Informational)**

## **8 Disclaimer**



# Audit Summary

This report has been prepared for MACHO APE Token on the Binance Smart Chain network. CFGNINJA provides both client-centered 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:

- 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.



# Project Overview

## Token Summary

Parameter	Result
Address	0xf0F0d09D3076FC2fFB05C24980e4E8A868288fb5
Name	MACHO APE
Token Tracker	MACHO APE (MACHO)
Decimals	18
Supply	10,000,000,000
Platform	Binance Smart Chain
compiler	v0.8.4+commit.c7e474f2
Contract Name	StandardToken
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	<a href="https://bscscan.com/address/0xf0F0d09D3076FC2fFB05C24980e4E8A868288fb5#code">https://bscscan.com/address/0xf0F0d09D3076FC2fFB05C24980e4E8A868288fb5#code</a>
Payment Tx	0xd8afe57061c9568b3fa805112ed94840b64e40be84db5e1e2bda4735eca1748c



# Project Overview

## Risk Analysis Summary

Parameter	Result
Buy Tax	5%
Sale Tax	5%
Is honeypot?	Clean
Can edit tax?	Yes
Is anti whale?	No
Is blacklisted?	No
Is whitelisted?	No
Holders	Clean
Security Score	90/100
Auditor Score	90/100
Confidence Level	Low

The following quick summary has been added to the project overview, however there are more details about the audit and their results please read every details.



## Main Contract Assessed Contract Name

Name	Contract	Live
MACHO APE	0xf0F0d09D3076FC2fFB05C24980e4E8A868288fb5	Yes

## TestNet Contract Assessed Contract Name

Name	Contract	Live
MACHO APE	0xB781A10223F028C0d1dE6bA44c71B8F2B84d9323	Yes

## Solidity Code Provided

SolidID	File Sha-1	FileName
BabyToken	da39a3ee5e6b4b0d3255bfef95601890afd80709	BabyToken.sol





# Smart Contract Vulnerability Checks

Vulnerability	Automatic Scan	Manual Scan	Result
Unencrypted Private Data On-Chain	Complete	Complete	Low / No Risk
Code With No Effects	Complete	Complete	Low / No Risk
Message call with hardcoded gas amount	Complete	Complete	Low / No Risk
Hash Collisions With Multiple Variable Length Arguments	Complete	Complete	Low / No Risk
Unexpected Ether balance	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
DoS With Block Gas Limit	Complete	Complete	Low / No Risk
Arbitrary Jump with Function Type Variable	Complete	Complete	Low / No Risk
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



# Mint Check

The Project Owners of MACHO APE does not have a mint function in the contract, owner cannot mint tokens after initial deploy

..

The Project has a Total Supply of 10,000,000,000 and cannot mint any more than the Max Supply.

.

Mint Notes:

Auditor Notes: A Mint Function was not found during the code review

Project Owner Notes:



Owner can't mint new coins





# Fees Check

The Project Owners of MACHO APE does not have the ability to set fees higher than 25% .

Team May have fees defined, however they dont have the ability to set those fees higher than 25%.

**Tax Fee Notes:**

**Auditor Notes:** Contract has no tax.

**Project Owner Notes:** .



**Fees can be changed up to a maximum of 25%**



# MaxTx Check

The Project Onwers of MACHO APE does not has the ability to set max tx amount

The Team allow any investors to swap, transfer or sale their total amount if needed.

**MaxTX Notes:**

**Auditor Notes:** No max tx found.

**Project Owner Notes:**

**Project Has No MaxTX**



# Pause Trade Check

The Project Onwers of MACHO APE Owner can pause trading but he can't move tokens  
(Owner can't pause trading)

The Team has done a great job to avoid stop trading, and investors has the ability to trade  
at any given time without any problems

**Pause Trade Notes:**

**Auditor Notes:** Not found.

**Project Owner Notes:**



**Owner can't pause trading**



# Contract Ownership

The contract ownership of MACHO APE 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.

The current owner is the address `0xEBD379f8af2de5E90f2B40d848DceeDc43b59666` which can be viewed from: [HERE](#)

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

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.

We recommend the team to use a Multisignature Wallet if contract is not going to be renounced, this will give the ability to the team to have more control over the contract.

**Ownership Notes:**

**Auditor Notes:** Owner Wallet received funds from Binance HotWallet.

**Project Owner Notes:**

# Liquidity Ownership

The token does not have liquidity at the moment of the audit, block 19689639



# KYC Information

The Project Owners of MACHO APE is not KYC. .

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

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.

## KYC Information Notes:

**Auditor Notes:** Asked project owner about KYC or Doxxed

**Project Owner Notes:** Project owner has no plans to KYC



# Mythx Security Summary Checks

ID	Severity	Name	File	location
SWC-100	Pass	Function Default Visibility	BabyToken.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	BabyToken.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	BabyToken.sol	L: 0 C: 0
SWC-103	Pass	A floating pragma is set.	BabyToken.sol	L: 5 C: 0
SWC-104	Pass	Unchecked Call Return Value.	BabyToken.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	BabyToken.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	BabyToken.sol	L: 0 C: 0
SWC-107	Pass	Read of persistent state following external call.	BabyToken.sol	L: 0 C: 0
SWC-108	Pass	State variable visibility is not set..	BabyToken.sol	L: 0 C: 0
SWC-109	Pass	Uninitialized Storage Pointer.	BabyToken.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	BabyToken.sol	L: 0 C: 0
SWC-111	Pass	Use of Deprecated Solidity Functions.	BabyToken.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	BabyToken.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	BabyToken.sol	L: 0 C: 0



ID	Severity	Name	File	location
SWC-114	Pass	Transaction Order Dependence.	BabyToken.sol	L: 0 C: 0
SWC-115	Low	Authorization through tx.origin.	BabyToken.sol	L: 474 C: 15
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	BabyToken.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	BabyToken.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	BabyToken.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	BabyToken.sol	L: 0 C: 0
SWC-120	Pass	Potential use of block.number as source of randomness.	BabyToken.sol	L: 0 C: 0
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	BabyToken.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	BabyToken.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	BabyToken.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	BabyToken.sol	L: 0 C: 0
SWC-125	Pass	Incorrect Inheritance Order.	BabyToken.sol	L: 0 C: 0
SWC-126	Pass	Insufficient Gas Griefing.	BabyToken.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	BabyToken.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	BabyToken.sol	L: 0 C: 0





ID	Severity	Name	File	location
SWC-129	Pass	Typographical Error.	BabyToken.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U+202E).	BabyToken.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	BabyToken.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	BabyToken.sol	L: 0 C: 0
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	BabyToken.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	BabyToken.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	BabyToken.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	BabyToken.sol	L: 0 C: 0

We scan the contract for additional security issues using MYTHX and industry standard security scanning tool



# Security Check Details Page

SWC-115 - Authorization through tx.origin

CWE-477: Use of Obsolete Function

Description:

tx.origin is a global variable in Solidity which returns the address of the account that sent the transaction. Using the variable for authorization could make a contract vulnerable if an authorized account calls into a malicious contract. A call could be made to the vulnerable contract that passes the authorization check since tx.origin returns the original sender of the transaction which in this case is the authorized account.

Remediation:

tx.origin should not be used for authorization. Use msg.sender instead.

References:

Solidity Documentation - tx.origin

Ethereum Smart Contract Best Practices - Avoid using tx.origin

SigmaPrime - Visibility.

SWC Information Notes:

**Auditor Notes:** No Vulnerabilities were found during the security scan, however we did notice they used an older compiler version instead of latest of 0.8.14. Important to read about the bugs associated with 0.7.6 <https://docs.soliditylang.org/en/v0.7.6/bugs.html#>

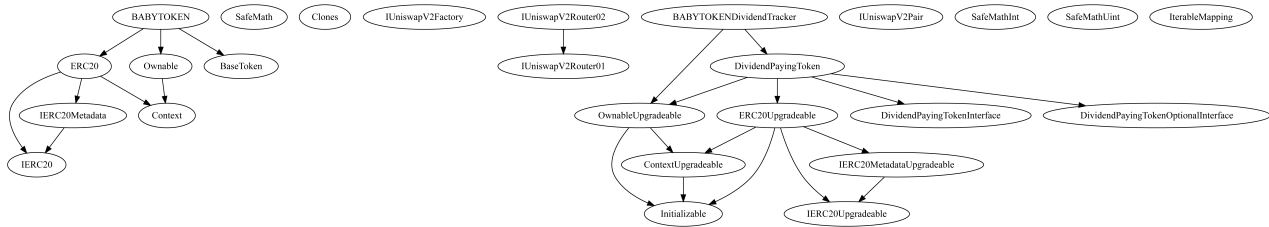
Project Owner Notes:



# Call Graph and Inheritance

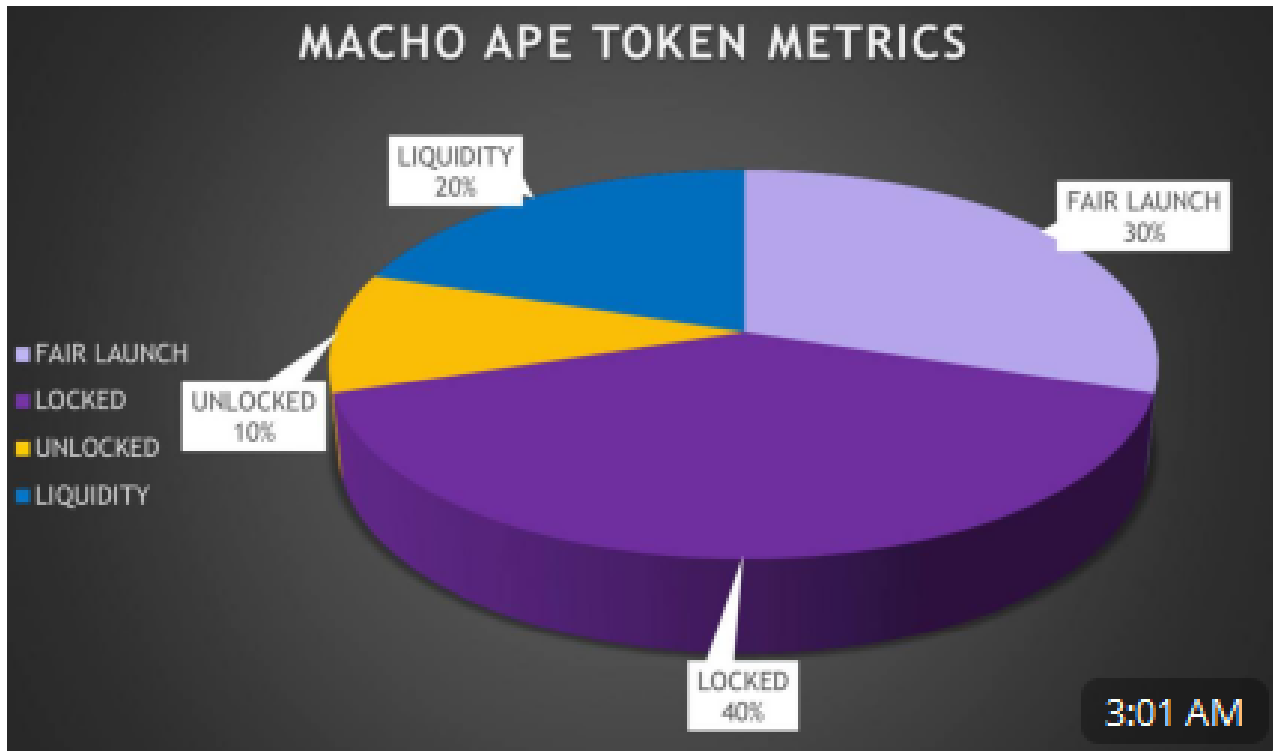
The contract for MACHO APE has the following call graph structure

The Project has a Total Supply of 10,000,000,000 and has the following inheritance



# Tokenomics

The contract for MACHO APE has the following tokenomics



## Privileged Functions (onlyOwner)

Function Name	Parameters	Visibility
renounceOwnership	none	public
transferOwnership	address newOwner	public
distributeCAKEDividends	(uint256 amount)	public
excludeFromDividends	(address account)	external
updateClaimWait	uint256 newClaimWait	external
updateMinimumTokenBalance ForDividends	uint256 amount	external
setBalance	(address payable account, uint256 newBalance)	external
processAccount	address payable account, bool automatic	external
setSwapTokensAtAmount	uint256 amount	external
updateDividendTracker	address newAddress	public
updateUniswapV2Router	address newAddress	public
excludeFromFees	address account, bool excluded	public
excludeMultipleAccountsFrom Fees	(address[] calldata accounts, bool excluded)	public
setMarketingWallet	address payable wallet	public



Function Name	Parameters	Visibility
setTokenRewardsFee	uint256 value	external
setLiquiditFee	uint256 value	external
setMarketingFee	uint256 value	external
setAutomatedMarketMakerPair	address pair, bool value	external
updateGasForProcessing	(uint256 newValue)	external



## Auditor Final Feedback.

### Important Notes To The Users:

- Macho Ape Website seems authentic.
- telegram group is botted.
- Twitter and Instagram are botted.
- Instagram is set to private.
- Customer provided Whitepaper with the details of the project.
- Owner can't charge fees up to 25%.
- Owner can't set max tx amount.
- Owner can't pause trading.
- No high-risk Exploits/Vulnerabilities Were Found in the Source Code.

## Audit Status





# Social Media Checks

Social Media	URL	Result
Twitter	<a href="http://twitter.com/machoapecub">http://twitter.com/machoapecub</a>	Pass
Instagram	<a href="http://instagram.com/machoapecub">http://instagram.com/machoapecub</a>	Pass
Website	<a href="http://machoapec.com">http://machoapec.com</a>	Pass
Telegram	<a href="http://t.me/machoapec">http://t.me/machoapec</a>	Pass

We recommend to have 3 or more social media sources including a completed working websites.

**Social Media Information Notes:**

**Auditor Notes:** undefined

**Project Owner Notes:**



# Disclaimer

CFGNINJA 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 advocacy 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.

All information provided in this report does not constitute financial or investment advice, nor should it be used to signal that any persons reading this report should invest their funds without sufficient individual due diligence regardless of the findings presented in this report. Information is provided 'as is', and CFGNINJA is under no covenant to the completeness, accuracy or solidity of the contracts audited. In no event will CFGNINJA or its partners, employees, agents or parties related to the provision of this audit report be liable to any parties for, or lack thereof, decisions and/or actions with regards to the information provided in this audit report.

The assessment services provided by CFGNINJA is subject to dependencies and under continuing development. You agree that your access and/or use, including but not limited to any services, reports, and materials, will be at your sole risk on an as-is, where-is, and as-available basis. Cryptographic tokens are emergent technologies and carry with them high levels of technical risk and uncertainty. The assessment reports could include false positives, false negatives, and other unpredictable results. The services may access, and depend upon, multiple layers of third-parties.

