



Cyberscope

# Audit Report

## **BabyGrok**

December 2023

Network    ETH

Address    0x376556327ca46ae23b439ba962d73ee5ce95fb4c

Audited by    © cyberscope

# Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Passed
●	OTUT	Transfers User's Tokens	Passed
●	ELFM	Exceeds Fees Limit	Passed
●	MT	Mints Tokens	Passed
●	BT	Burns Tokens	Passed
●	BC	Blacklists Addresses	Passed

## Diagnostics

● Critical ● Medium ● Minor / Informative

Severity	Code	Description	Status
●	L09	Dead Code Elimination	Unresolved
●	L22	Potential Locked Ether	Unresolved

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## Review

Contract Name	BabyGrok
Compiler Version	v0.8.17+commit.8df45f5f
Optimization	200 runs
Explorer	<a href="https://etherscan.io/address/0x376556327ca46ae23b439ba962d73ee5ce95fb4c">https://etherscan.io/address/0x376556327ca46ae23b439ba962d73ee5ce95fb4c</a>
Address	0x376556327ca46ae23b439ba962d73ee5ce95fb4c
Network	ETH
Symbol	BabyGrok
Decimals	18
Total Supply	69,000,000,000

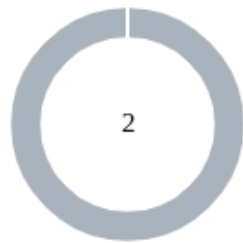
## Audit Updates

Initial Audit	03 Dec 2023
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## Source Files

Filename	SHA256
BabyGrok.sol	5c5f9abb1223a7b4278ac660f7ca65ea17513d0bba36a0acb8ce383ad3e7cb1b

## Findings Breakdown



● Critical	0
● Medium	0
● Minor / Informative	2

Severity	Unresolved	Acknowledged	Resolved	Other
● Critical	0	0	0	0
● Medium	0	0	0	0
● Minor / Informative	2	0	0	0

## L09 - Dead Code Elimination

Criticality	Minor / Informative
Location	BabyGrok.sol#L193
Status	Unresolved

### Description

In Solidity, dead code is code that is written in the contract, but is never executed or reached during normal contract execution. Dead code can occur for a variety of reasons, such as:

- Conditional statements that are always false.
- Functions that are never called.
- Unreachable code (e.g., code that follows a return statement).

Dead code can make a contract more difficult to understand and maintain, and can also increase the size of the contract and the cost of deploying and interacting with it.

```
function _burn(address account, uint256 amount) internal virtual {
    require(account != address(0), "ERC20: burn from the zero address");

    _beforeTokenTransfer(account, address(0), amount);

    uint256 accountBalance = _balances[account];
    ...
}
_totalSupply -= amount;

emit Transfer(account, address(0), amount);

_afterTokenTransfer(account, address(0), amount);
}
```

### Recommendation

To avoid creating dead code, it's important to carefully consider the logic and flow of the contract and to remove any code that is not needed or that is never executed. This can help improve the clarity and efficiency of the contract.



## L22 - Potential Locked Ether

<b>Criticality</b>	Minor / Informative
<b>Location</b>	BabyGrok.sol#L242
<b>Status</b>	Unresolved

### Description

The contract contains Ether that has been placed into a Solidity contract and is unable to be transferred. Thus, it is impossible to access the locked Ether. This may produce a financial loss for the users that have called the payable method.

```
receive() external payable {  
  
}
```

### Recommendation

The team is advised to either remove the payable method or add a withdraw functionality. it is important to carefully consider the risks and potential issues associated with locked Ether.

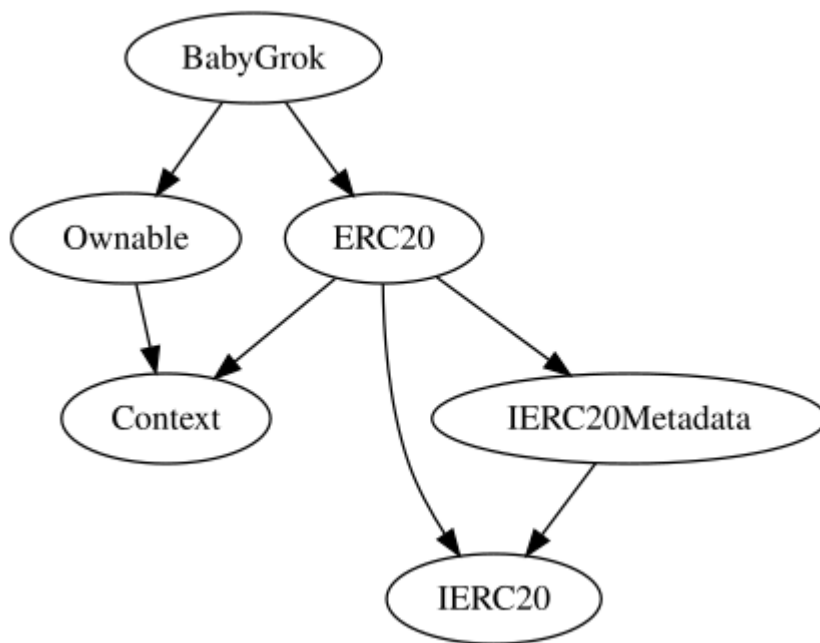
# Functions Analysis

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
<b>IERC20</b>	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
<b>IERC20Metadata</b>	Interface	IERC20		
	name	External		-
	symbol	External		-
	decimals	External		-
<b>Context</b>	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
<b>Ownable</b>	Implementation	Context		

		Public	✓	-
	owner	Public		-
	transferOwnership	External	✓	onlyOwner
<b>ERC20</b>	Implementation	Context, IERC20, IERC20Meta data		
		Public	✓	-
	name	Public		-
	symbol	Public		-
	decimals	Public		-
	totalSupply	Public		-
	balanceOf	Public		-
	transfer	Public	✓	-
	allowance	Public		-
	approve	Public	✓	-
	transferFrom	Public	✓	-
	increaseAllowance	Public	✓	-
	decreaseAllowance	Public	✓	-
	_transfer	Internal	✓	
	_mint	Internal	✓	
	_burn	Internal	✓	
	_approve	Internal	✓	
	_beforeTokenTransfer	Internal	✓	

	_afterTokenTransfer	Internal	✓	
<b>BabyGrok</b>	Implementation	ERC20, Ownable		
		Public	✓	ERC20
		External	Payable	-

## Inheritance Graph



# Flow Graph



## Summary

BabyGrok contract implements a token mechanism. This audit investigates security issues, business logic concerns and potential improvements. BabyGrok is an interesting project that has a friendly and growing community. The Smart Contract analysis reported no compiler error or critical issues. The contract Owner can access some admin functions that can not be used in a malicious way to disturb the users' transactions.

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Cyberscope is one of the leading smart contract audit firms in the crypto space and has built a high-profile network of clients and partners.



**The Cyberscope team**

<https://www.cyberscope.io>