

What is a rug pull?

A rug pull is a crypto scam where a project's own developers deliberately drain its funds or destroy its value, abandoning investors. It is not an external hack but insider fraud, enabled by excessive privileges in the contract: an owner who can mint unlimited tokens, withdraw the liquidity pool, pause selling (a honeypot), or change fees to 100%. The defense is verifying what the team can do: audited code, locked or renounced privileges, locked liquidity, and transparent, time-locked controls before you trust a project.

HOW IT WORKS

01 How it works and red flags

Common rug-pull mechanisms:

- **Liquidity removal:** the team holds the liquidity-pool tokens and withdraws the entire pool, leaving the token untradeable and worthless.
- **Unlimited mint:** an owner-only mint lets them create and dump endless tokens.
- **Honeypot / sell-disable:** hidden logic lets the owner block holders from selling while they exit.
- **Fee manipulation:** the owner sets the transfer/sell fee to ~100%, capturing everything.
- **Hidden privileges in a proxy/upgrade** that change the rules later.

These are checked before investing, not after.
Documented for defensive context.

AUDIT THE POWERS, NOT JUST THE CODE

A rug pull is rarely a "bug", it is legitimate privileged functions used against holders. The key question is what can the team do: can they drain liquidity, mint, or block sales? Locked or renounced privileges are the real protection.

HOW TO DEFEND

- **Check owner privileges:** can anyone mint, drain liquidity, pause transfers, or change fees? Excessive owner power is the warning sign.
- **Verify locked liquidity** (time-locked LP) and renounced or time-locked ownership of critical functions.
- **Require a credible audit** and verified, published source code, not unverified bytecode.
- **Look for honeypot logic** that blocks selling, and test sells on testnets/simulators.
- **Favor transparent teams** with multisig and timelocks over anonymous unlimited-control deployers.

SOURCES

- [1] OWASP Smart Contract Top 10
- [2] Ethereum.org: Smart contract security
- [3] SWC Registry: Smart Contract Weakness Classification

Get your smart contracts audited before they go on-chain.

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