REGEX CHEAT SHEET

regexguide.com/patterns/ethereum-address.html

Ethereum address

0x + 40 hex characters Ethereum address.

```
^0x[a-fA-F0-9]{40}$
```

Token-by-token breakdown

Token	Meaning
`^`	start of string (or line in multiline mode)
`0x`	literal text “0x”
`[a-fA-F0-9]{40}`	exactly 40 times: any of: a–f, A–F, digits
`$`	end of string (or line in multiline mode)

Quick usage in 7 languages

JavaScript

```
const re = /^0x[a-fA-F0-9]{40}$/;
re.test(value);
```

Python

```
import re
re.match(r"^0x[a-fA-F0-9]{40}$", value)
```

Java

```
Pattern.compile("^0x[a-fA-F0-9]{40}$").matcher(value).matches();
```

C# / .NET

```
Regex.IsMatch(value, @"^0x[a-fA-F0-9]{40}$");
```

Go

```
regexp.MustCompile(`^0x[a-fA-F0-9]{40}$`).MatchString(value)
```

Ruby

```
/^0x[a-fA-F0-9]{40}$/.match?(value)
```

PHP

```
preg_match('~^0x[a-fA-F0-9]{40}$~', $value);
```

Common pitfalls

- **Anchored to the whole string.** This pattern uses ^ and $, so it requires the entire input to match. To find it inside a longer text, drop the anchors and use the global (g) flag.
- **Case sensitivity.** Letter ranges are case-sensitive — use the i flag if the input case can vary.
- **Validate beyond format.** Matching the format doesn't guarantee the value is real. Confirm the ethereum address against a source of truth (database, API, or checksum) where it matters.