

Domain name

Bare domain with optional subdomain.

```
^(?!-)[A-Za-z0-9-]{1,63}(?!-)(\.[A-Za-z0-9-]{1,63})*\.[A-Za-z]{2,}$
```

Token-by-token breakdown

Token	Meaning
^	start of string (or line in multiline mode)
(?!	start of a negative lookahead — NOT followed by
-	literal text “-”
)	end of group
[A-Za-z0-9-]{1,63}	between 1 and 63 times: any of: uppercase letters, lowercase letters, digits, “-”
(?<!	start of a negative lookbehind — NOT preceded by
-	literal text “-”
)	end of group
(	start of a capturing group
\.	literal “.”
[A-Za-z0-9-]{1,63}	between 1 and 63 times: any of: uppercase letters, lowercase letters, digits, “-”
)*	end of group, zero or more
\.	literal “.”
[A-Za-z]{2,}	2 or more times: any of: uppercase letters, lowercase letters
\$	end of string (or line in multiline mode)

Quick usage in 7 languages

JavaScript	<pre>const re = /^(?!-)[A-Za-z0-9-]{1,63}(?!-)(\.[A-Za-z0-9-]{1,63})*\.[A-Za-z]{2,}\$/; re.test(value);</pre>
Python	<pre>import re re.match(r"^(?!-)[A-Za-z0-9-]{1,63}(?!-)(\.[A-Za-z0-9-]{1,63})*\.[A-Za-z]{2,}\$", value)</pre>
Java	<pre>Pattern.compile("^(?!-)[A-Za-z0-9-]{1,63}(?!-)(\\.[A-Za-z0-9-]{1,63})*\\. [A-Za-z]{2,}\$") .matcher(value).matches();</pre>
C# / .NET	<pre>Regex.IsMatch(value, @"^(?!-)[A-Za-z0-9-]{1,63}(?!-)(\.[A-Za-z0-9-]{1,63})*\.[A-Za-z]{2,}\$");</pre>
Go	<pre>regexp.MustCompile(`^(?!-)[A-Za-z0-9-]{1,63}(?!-)(\.[A-Za-z0-9-]{1,63})*\.[A-Za-z]{2,}\$`) .MatchString(value)</pre>
Ruby	<pre>/^(?!-)[A-Za-z0-9-]{1,63}(?!-)(\.[A-Za-z0-9-]{1,63})*\.[A-Za-z]{2,}\$/ .match?(value)</pre>
PHP	<pre>preg_match('~^(?!-)[A-Za-z0-9-]{1,63}(?!-)(\.[A-Za-z0-9-]{1,63})*\.[A-Za-z]{2,}\$~', \$value);</pre>

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.
- **ASCII letters only.** `[a-zA-Z]` excludes accented and non-Latin letters (é, ü, ß, ñ, and non-Latin scripts). For international input use Unicode properties like `\p{L}` with the `u` flag.
- **Escape it correctly per language.** In Java and JavaScript strings each backslash must be doubled (`\\d`); in Python, Go, and C# use raw/verbatim strings so the backslashes survive.
- **Validate beyond format.** Matching the format doesn't guarantee the value is real. Confirm the domain name against a source of truth (database, API, or checksum) where it matters.