# eth_getBlockByNumber

Returns information about a block by hash.

## Parameters

- block parameter
- : [Required
- ] A hexadecimal block number, or one of the string tagslatest
- ,earliest
- ,pending
- ,safe
- , orfinalized
- . See thedefault block parameter
- .
- show transaction details flag
- : [Required
- ] If set totrue
- , returns the full transaction objects. Iffalse
- returns only the hashes of the transactions.

## Returns

A block object, or null when no block was found. The returned block object contains the following keys and their values:

- difficulty
- : A hexadecimal of the difficulty for this block.
- extraData
- : The "extra data" field of this block.
- gasLimit
- : Maximum gas allowed in this block.
- gasUsed
- : Total used gas by all transactions in this block.
- hash
- : 32 bytes. Hash of the block.Null
- when the returned block is the pending block.
- logsBloom
- : 256 bytes. The bloom filter for the logs of the block.Null
- when the returned block is the pending block.
- miner
- : 20 bytes. Address of the beneficiary to whom the mining rewards were given.
- nonce
- : 8 bytes. Hash of the generated proof-of-work.Null
- when the returned block is the pending block.
- number
- : Block number.Null
- when the returned block is the pending block.
- parentHash
- : 32 bytes. Hash of the parent block.
- receiptsRoot
- : 32 bytes. The root of the receipts trie of the block. Also seeTries in Ethereum
- .
- sha3Uncles
- : 32 bytes. The SHA3 of the uncles data in the block.
- size
- : A hexadecimal of the size of this block in bytes.
- stateRoot
- : 32 bytes. The root of the final state trie of the block.
- timestamp
- : The unix timestamp for when the block was collated.
- totalDifficulty
- : A hexadecimal of the total difficulty of the chain until this block.
- transactions
- : [Array] An array of transaction objects, or 32 bytes transaction hashes depending on the last given parameter.
- transactionsRoot
- : 32 bytes. The root of the transaction trie of the block.
- uncles
- : [Array] An array of uncle hashes.

## Example

ReplaceYOUR-API-KEY with an API key from yourInfura dashboard .

### Request

- cURL

curl https://blast-mainnet.infura.io/v3/YOUR-API-KEY \ -X POST \ -H "Content-Type: application/json" \ -d '{"jsonrpc":"2.0","method":"eth_getBlockByNumber","params":["0x5BAD55",false],"id":1}'

### Response

- JSON

{ "id"

:

1 , "jsonrpc"

:

"2.0" , "result"

:

{ "difficulty"

:

"0xbfabcdbd93dda" , "extraData"

:

"0x737061726b706f6f6c2d636e2d6e6f64652d3132" , "gasLimit"

:

"0x79f39e" , "gasUsed"

:

"0x79ccd3" , "hash"

:

"0xb3b20624f8f0f86eb50dd04688409e5cea4bd02d700bf6e79e9384d47d6a5a35" , "logsBloom"

:

"0x4848112002a2020aaa0812180045840210020005281600c80104264300080008000491220144461026015300100000128005018401002090a824a4150015410020140400d808440106689b29d0280b , "miner"

:

"0x5a0b54d5dc17e0aadc383d2db43b0a0d3e029c4c" , "mixHash"

:

"0x3d1fdd16f15aeab72e7db1013b9f034ee33641d92f71c0736beab4e67d34c7a7" , "nonce"

:

"0x4db7a1c01d8a8072" , "number"

:

"0x5bad55" , "parentHash"

:

"0x61a8ad530a8a43e3583f8ec163f773ad370329b2375d66433eb82f005e1d6202" , "receiptsRoot"

:

"0x5eced534b3d84d3d732ddbc714f5fd51d98a941b28182b6efe6df3a0fe90004b" , "sha3Uncles"

:

"0x8a562e7634774d3e3a36698ac4915e37fc84a2cd0044cb84fa5d80263d2af4f6" , "size"

:

"0x41c7" , "stateRoot"

:

"0xf5208fffa2ba5a3f3a2f64ebd5ca3d098978bedd75f335f56b705d8715ee2305" , "timestamp"

:

"0x5b541449" , "totalDifficulty"

:

"0x12ac11391a2f3872fcd" , "transactions"

:

[ "0x8784d99762bccd03b2086eabccee0d77f14d05463281e121a62abfebcf0d2d5f" , "0x311be6a9b58748717ac0f70eb801d29973661aaf1365960d159e4ec4f4aa2d7f" , "0xe42b0256058b7cad8a14b136a0364acda0b4c36f5b02dea7e69bfd82cef252a2" , "0x4eb05376055c6456ed883fc843bc43df1dcf739c321ba431d518aecd7f98ca11" , "0x994dd9e72b212b7dc5fd0466ab75adf7d391cf4f206a65b7ad2a1fd032bb06d7" , ... "0xf1cd627c97746bc75727c2f0efa2d0dc66cca1b36d8e45d897e18a9b19af2f60" , "0x241d89f7888fbcfadfd415ee967882fec6fdd67c07ca8a00f2ca4c910a84c7dd" ] , "transactionsRoot"

:

"0xf98631e290e88f58a46b7032f025969039aa9b5696498efc76baf436fa69b262" , "uncles"

:

[ "0x824cce7c7c2ec6874b9fa9a9a898eb5f27cbaf3991dfa81084c3af60d1db618c" ] } }