# eth\_getBlockByHash

Returns information about a block whose hash is in the request

## **Parameters**

- hash
- : (string) [Required
- ] A string representing the hash (32 bytes) of a block transaction details flag
- : (boolean) [Required
- 1 If set totrue
- returns the full transaction objects, iffalse
- returns only the hashes of the transactions

#### Returns

A block object matching the hash in the request, or null when no block was found. The matched block 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

- : 32 bytes. The hash of the block. Null when the returned block is the pending block
- : 256 bytes. The bloom filter for the logs of the block. Null when the returned block is the pending block.
- : 20 bytes. The address of the beneficiary to whom the mining rewards were given
- : 8 bytes. The hash of the generated proof-of-work. Null when the returned block is the pending block.
- : The block number. Null when the returned block is the pending block
- parentHash
- : 32 bytes. The hash of the parent block. receiptsRoot
- : 32 bytes. The root of the receipts trie of the block. sha3Uncles
- : 32 bytes. The SHA3 of the uncles data in the block.
- : A hexadecimal of the size of this block in bytes
- stateRoot
- : 32 bytes. The root of the final state trie of the block.
- timestamp
- : Unix timestamp for when the block was collated
- totalDifficulty
- : A hexadecimal of the total difficulty of the chain until this block.
- : [Array] An array of transaction objects, or 32 bytes transaction hashes depending on the last given parameter.
- : 32 bytes. The root of the transaction trie of the block
- : [Array] An Array of uncle hashes.

# Example

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

# Request

• cURL

 $curl \ https://blast-mainnet.infura.io/v3/YOUR-API-KEY \ -X \ POST \ -H \ "Content-Type: application/json" \ -d \ '("jsonrpc":"2.0","method":"eth_getBlockByHash","params": ["0xb3b20624f8f0f86eb50dd04688409e5cea4bd02d700bf6e79e9384d47d6a5a35",false],"id":1}'$ 

## Response

JSON

{"jsonrpc": "2.0", "id": 1, "result": {"difficulty": "0xbfabcdbd93dda", "extraData": "0x737061726b706f6f6c2d636e2d6e6f64652d3132", "gasLimit": "0x79f39e", "gasUsed": "0x79ccd3", "hash": "0x50x50624f8f0f86eb50dd04688409e5cea4bd02d700bf6e79e9384d47d6a5a35", "logsBloom": "0x4848112002a2020aaa0812180045840210020005281600c801042643000800008000491220144461026015300100000128005018401002090a824a4150015410020140400d808440106689b29d0280b "miner": "0x5a0b54d5dc17e0aadc383d2db43b0a0d3e029c4c", "mixHash": "0x3d1fdd16f15aeab72e7db1013b9f034ee33641d92f71c0736beab4e67d34c7a7", "nonce": "0x4db7a1c01d8a8072", "number": "0x5a0b54d5dc17e0aadc383d2db43b0a0d3e029c4c", "mixHash": "0x3d1fdd16f15aeab72e7db1013b9f034ee33641d92f71c0736beab4e67d34c7a7", "nonce": "0x4db7a1c01d8a8072", "number": "0x5a0b543d3d4d3d72ddbc714f5fd51d98a49152e8152befe6df3a0fe90004b", "sha3Uncles": "0x8a562e7654774d3e3a36698ac4915e37fc84a2cd0044cb84fa5d80263d2af4f6", "size": "0x41c7", "stateRoot": "0xf5208fffa2ba5a3f3a2f64ebd5ca3d098978bedd75f335f56b705d8715ee2305", "timestamp": "0x5b541449", "totalDifficulty": "0x12ac11391a2f3872fcd", "transactions": ["0x849409762bccd03b2086eabcce0d77f14d05463281e121a62abfebcf0d2d5f", "0x311be6a9b58748717ac0f70eb801d29973661aaf1365960d159e4ec4f4aa2d7", "0xe42b0256058b7cad8a14b136a0364acda0b4c36f5b02dea7e69bfd82cef252a2", "0x4eb05376055c6456ed883fc843bc43df1dc739a231ba431d518aecd7f98ca11", "0x994dd9e72b212b7dc5fd0466ab75adf7d391cf4206a65b7ad2a1fd032bb0d67", "0x3f1be6a9b58748717ac0f70eb801d29973661aaf1365960d159e4ec4f4aa2d7", "0x7e537d687a5552529480440c6ea2e1a8469cd98906eaff8597f3d2a44422ff97", "0xaf62220e92bed6d77a2c19ffc60dad77d71bd5028c5230c896ab4b9552a39b50", "0xf1fa677edda7e5add8e794732c7554cd5459a5c12781dc71de73c7937dfb2775", "0x241d89f7888fbctadfd415ee967882fec6fdd67c07ca8a00f2ca4c910a84c7dd"], "transactionsRoot": "0xf98631e290e88f58a46b7032f025969039aa9b5696498efc76baf436fa69b262", "uncles": ["0x824cce7c7c2ec6874b9fa9a9a898eb5f27cbaf3991dfa81084c3af60d1db618c"]}}

Last updatedonApr 19, 2024 Previous eth\_getBalanceValues Next eth\_getBlockByNumber