eth_getUncleByBlockHashAndIndex

Returns information about a uncle of a block given the block hash and the uncle index position.

Parameters

- block hash
- : [Required
-] A string representing the hash (32 bytes) of a block.
- uncle index position
- : [Required
-] A hexadecimal equivalent of the integer indicating the uncle's index position.

Returns

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

- number
- : The block number.Null
- when the returned block is the pending block.
- hash
- : 32 bytes. Hash of the block.Null
- when its pending block.
- parentHash
- : 32 bytes. Hash of the parent block.
- nonce
- : 8 bytes. Hash of the generated proof-of-work.Null
- when the returned block is the pending block.
- sha3Uncles
- : 32 bytes. The SHA3 of the uncles data in the block.
- logsBloom
- : 256 bytes. The Bloom filter for the logs of the block.Null
- when the returned block is the pending block.
- transactionsRoot
- : 32 bytes. The root of the transaction trie of the block.
- stateRoot
- : 32 bytes. The root of the final state trie of the block.
- receiptsRoot
- : 32 bytes. The root of the receipts trie of the block.
- miner
- : 20 bytes. The address of the beneficiary to whom the mining rewards were given.
- difficulty
- : The hexadecimal of the difficulty for this block.
- totalDifficulty
- : The hexadecimal of the total difficulty of the chain until this block.
- extraData
- : The "extra data" field of this block.
- size
- : The hexadecimal of the size of this block in bytes.
- gasLimit
- : Maximum gas allowed in this block.
- gasUsed
- : Total used gas by all transactions in this block.
- timestamp
- : The unix timestamp for when the block was collated.
- uncles
- : (Array). An array of uncle hashes.

Example

ReplaceYOUR-API-KEY with an API key from your[Infura dashboard](#) .

Request

- cURL
- WSS

curl https://mainnet.infura.io/v3/YOUR-API-KEY \ -X POST \ -H "Content-Type: application/json" \ -d '{"jsonrpc":"2.0","method":"eth_getUncleByBlockHashAndIndex","params": ["0xb3b20624f8f0f86eb50dd04688409e5cea4bd02d700bf6e79e9384d47d6a5a35","0x0"],"id":1}' wscat -c wss://mainnet.infura.io/ws/v3/YOUR-API-KEY -x '{"jsonrpc":"2.0","method":"eth_getUncleByBlockHashAndIndex","params": ["0xb3b20624f8f0f86eb50dd04688409e5cea4bd02d700bf6e79e9384d47d6a5a35","0x0"],"id":1}'

Response

- JSON

{ "id" : 1, "jsonrpc" : "2.0", "result" : { "difficulty": "0x57f117f5c", "extraData": "0x476574682f76312e302e302f77696e646f77732f676f312e342e32", "gasLimit": "0x1388", "gasUsed": "0x0", "hash": "0x932bdf904546a2287a2c9b2ede37925f698a7657484b172d4e5184f80bdd464d", "logsBloom": "0x00", "miner": "0x5bf5e9cf9b456d6591073513de7fd69a9bef04bc", "mixHash": "0x4500aa4ee2b3044a155252e35273770edeb2ab6f8cb19ca8e732771484462169", "nonce": "0x24732773618192ac", "number": "0x299", "parentHash": "0xa779859b1ee558258b7008bbabff272280136c5dd3eb3ea3bfa8f6ae03bf91e5", "receiptsRoot": "0x56e81f171bcc55a6ff8345e692c0f86e5b48e01b996cadc001622fb5e363b421", "sha3Uncles": "0x1dcc4de8dec75d7aab85b567b6ccd41ad312451b948a7413f0a142fd40d49347", "size": "0x21d", "stateRoot": "0x2604fbf5183f5360da249b51f1b9f1e0f315d2ff3ffa1a4143ff221ad9ca1fec", "timestamp": "0x55ba4827", "totalDifficulty": null, "transactionsRoot": "0x56e81f171bcc55a6ff8345e692c0f86e5b48e01b996cadc001622fb5e363b421", "uncles": [] } }