

# eth\_getTransactionByBlockNumberAndIndex

Returns information about a transaction given block number and transaction index position.

## Parameters

- block parameter
  - : [Required
  - ] A hexadecimal block number, or one of the string tags latest
  - , earliest
  - , pending
  - , safe
  - , or finalized
  - . See the [default block parameter](#)
  - .
- transaction index position
  - : [Required
  - ] A hexadecimal of the integer representing the position in the block.

## Returns

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

- accessList
  - : [optional
  - ] A list of addresses and storage keys accessed by the transaction. See [access list transactions](#)
  - .
- blockHash
  - : 32 bytes. A hash of the block including this transaction. null
  - when it's pending.
- blockNumber
  - : The number of the block including this transaction. null
  - when it's pending.
- chainID
  - : [optional
  - ] chain ID specifying the network. Returned only for [EIP-1559 transactions](#)
  - .
- from
  - : 20 bytes. The address of the sender.
- gas
  - : Gas provided by the sender.
- gasPrice
  - : Gas price provided by the sender in Wei.
- hash
  - : 32 bytes. The hash of the transaction.
- input
  - : The data sent along with the transaction.
- maxPriorityFeePerGas
  - : [optional
  - ] Maximum fee, in Wei, the sender is willing to pay per gas above the base fee. See [EIP-1559 transactions](#)
  - .
- maxFeePerGas
  - : [optional
  - ] Maximum total fee (base fee + priority fee), in Wei, the sender is willing to pay per gas. See [EIP-1559 transactions](#)
  - .
- nonce
  - : The number of transactions made by the sender prior to this one.
- r
  - : 32 bytes. The ECDSA signature
  - .
- s
  - : 32 bytes. The ECDSA signature
  - .
- to
  - : 20 bytes. The address of the receiver. null
  - when it's a contract creation transaction.
- transactionIndex
  - : The transaction's index position in the block, in hexadecimal. null
  - when it's pending.
- type
  - : The [transaction type](#)
  - .
- v
  - : The ECDSA recovery ID.
- value
  - : The value transferred in Wei.

## Example

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

## Request

- cURL
- WSS

```
curl https://optimism-mainnet.infura.io/v3/YOUR-API-KEY \-X POST \-H "Content-Type: application/json" \-d '{"jsonrpc":"2.0","method":"eth_getTransactionByBlockNumberAndIndex","params":["0x5BAD55","0x0"],"id":1}' wscat -c wss://optimism-mainnet.infura.io/ws/v3/YOUR-API-KEY -x '{"jsonrpc":"2.0","method":"eth_getTransactionByBlockNumberAndIndex","params":["0x5BAD55","0x0"],"id":1}'
```

## Response

- JSON

[illegible]

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