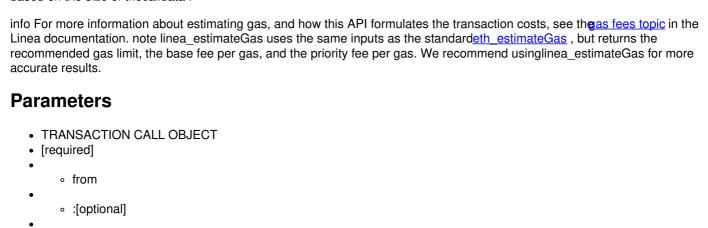# linea_estimateGas

Generates and returns the estimated amount of gas required to allow the transaction to complete and be published on Ethereum. The method does not submit the transaction to the blockchain.

ThepriorityFeePerGas returned by this method includes the cost of submitting the transaction to Ethereum, which can vary based on the size of thecalldata .

info For more information about estimating gas, and how this API formulates the transaction costs, see thegas fees topic in the Linea documentation. note linea_estimateGas uses the same inputs as the standardeth_estimateGas , but returns the recommended gas limit, the base fee per gas, and the priority fee per gas. We recommend usinglinea_estimateGas for more accurate results.

Parameters

- TRANSACTION CALL OBJECT
- [required]
-
  - from
-
  - :[optional]
-
  - 20 bytes - The address the transaction is sent from.
-
  - to
-
  - :[optional]
-
  - 20 bytes - The address the transaction is directed to.
-
  - gas
-
  - :[optional]
-
  - Hexadecimal value of the gas provided for the transaction execution.linea_estimateGas
-
  - consumes
-
  - zero gas, but this parameter may be needed by some executions.
-
  - gasPrice
-
  - :[optional]
-
  - Hexadecimal value of the gas price used for each paid gas.
-
  - maxPriorityFeePerGas
-
  - :[optional]
-
  - Maximum fee, in wei, the sender is willing to pay per gas above the base fee.
-
  - maxFeePerGas
-
  - :[optional]
-
  - Maximum total fee (base fee + priority fee), in wei, the sender is willing to pay per gas.
-
  - value
-
  - :[optional]
-
  - Hexadecimal value of the value sent with this transaction.
-
  - data
-
  - :[optional]
-
  - Hash of the method signature and encoded parameters. See theEthereum contract ABI specification

- - .
- - block number
- - :[optional]
- - A string representing a block number, or one of the string tagslatest
- - ,earliest
- - ,pending
- - ,safe
- - , orfinalized
- - .
- - See thedefault block parameter
- - .

Returns

Hexidecimal values representing the recommended gas limit, the base fee per gas, and the priority fee per gas.

Example

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

Request

- cURL
- WSS

```
curl https://linea-mainnet.infura.io/v3/YOUR-API-KEY \ -X POST \ -H "Content-Type: application/json" \ -d
'{"jsonrpc":"2.0","method":"linea_estimateGas","params":
[{"from":"0x42c27251C710864Cf76f1b9918Ace3E585e6E21b","value":"0x1","gasPrice":"0x100000000","gas":"0x21000"}],"id":53}'
wscat -c wss://linea-mainnet.infura.io/ws/v3/YOUR-API-KEY -x '{"jsonrpc":"2.0","method":"linea_estimateGas","params":
[{"from":"0x42c27251C710864Cf76f1b9918Ace3E585e6E21b","value":"0x1","gasPrice":"0x100000000","gas":"0x21000"}],"id":53}'
```

Response

- JSON

```
{ "jsonrpc": "2.0", "id": 53, "result": { "baseFeePerGas": "0x7", "gasLimit": "0xcf08", "priorityFeePerGas": "0x43a82a4" } }
```

Last updatedonApr 19, 2024 Previous eth_syncing Next net_listening