


```
    "type": "text"
  }
],
"id": "msg_013Zva2CMHLNnXjNJKqJ2EF",
"model": "claude-3-5-sonnet-20241022",
"role": "assistant",
"stop_reason": "end_turn",
"stop_sequence": null,
"type": "message",
"usage": {
  "input_tokens": 2095,
  "output_tokens": 503
}
}
```

?????? ?

```
curl https://$Burncloud_API_BaseUrl/v1/messages \
  --header "anthropic-version: 2023-06-01" \
  --header "content-type: application/json" \
  --header "x-api-key: $Burncloud_API_KEY" \
  --data \
'{"model": "claude-3-5-sonnet-20241022",
  "messages": [
    {
      "role": "user",
      "content": [
        {
          "type": "image",
          "source": {
            "type": "base64",
            "media_type": "image/jpeg",
            "data": "/9j/4AAQSkZJRg..."
          }
        },
        {
          "type": "text",
          "text": "?????????"
        }
      ]
    }
  ]
}
```



```
        "content": "?????????"
    }
],
"tools": [
    {
        "name": "get_weather",
        "description": "????????",
        "input_schema": {
            "type": "object",
            "properties": {
                "location": {
                    "type": "string",
                    "description": "????,?:?"
                }
            },
            "required": ["location"]
        }
    }
]
}'
```

???? :

```
{
  "content": [
    {
      "type": "tool_use",
      "id": "toolu_01D7FLrfh4GYq7yT1ULFeyMV",
      "name": "get_weather",
      "input": { "location": "??" }
    }
  ],
  "id": "msg_013Zva2CMHLNnXjNJKqJ2EF",
  "model": "claude-3-5-sonnet-20241022",
  "role": "assistant",
  "stop_reason": "tool_use",
  "stop_sequence": null,
  "type": "message",
  "usage": {
    "input_tokens": 2156,
```

```
"output_tokens": 468
}
}
```

???? ?

```
curl https://$Burncloud_API_BaseUrl/v1/messages \
  --header "anthropic-version: 2023-06-01" \
  --header "content-type: application/json" \
  --header "x-api-key: $Burncloud_API_KEY" \
  --data \
'{"model": "claude-3-5-sonnet-20241022",
  "messages": [
    {
      "role": "user",
      "content": "□□□□"
    }
  ],
  "stream": true
}'
```

□□□□ :

```
{
  "type": "message_start",
  "message": {
    "id": "msg_013Zva2CMHLNnXjNJKqJ2EF",
    "model": "claude-3-5-sonnet-20241022",
    "role": "assistant",
    "type": "message"
  }
}
{
  "type": "content_block_start",
  "index": 0,
  "content_block": {
    "type": "text"
  }
}
```

```
}
{
  "type": "content_block_delta",
  "index": 0,
  "delta": {
    "text": "[]"
  }
}
{
  "type": "content_block_delta",
  "index": 0,
  "delta": {
    "text": "[]"
  }
}
{
  "type": "content_block_delta",
  "index": 0,
  "delta": {
    "text": "[]..."
  }
}
{
  "type": "content_block_stop",
  "index": 0
}
{
  "type": "message_delta",
  "delta": {
    "stop_reason": "end_turn",
    "usage": {
      "input_tokens": 2045,
      "output_tokens": 628
    }
  }
}
{
  "type": "message_stop"
}
```

???

??

POST /v1/messages

????

XXXXXXXXXX

API XXXX

x-api-key: \$Burncloud_API_KEY

XX \$Burncloud_API_KEY XX API XXXXXXXXXXXX API
XXXXXXXXXXXXXXXXXX

?????

anthropic-beta

- XXXXX
- XXXX

XXXXX beta XXXXXXXXXXXX

beta1,beta2 XXXXXXXXXXXX

anthropic-version

- XXXXX
- XXXX

XXXXX API XX

?????

max_tokens

- XXXX
- XXXX

XXXXX token XXXXXXXXXXXXXXXXXXXXXXXX

x > 1

messages

- []
- []

messages

[]

[] role [] content

[] :

```
[{"role": "user", "content": "Hello, Claude"}]
```

[] :

```
[
  {"role": "user", "content": "[ ]"},
  {"role": "assistant", "content": "[ ] Claude [ ]"},
  {"role": "user", "content": "[ ] LLM [ ]"}
]
```

[] :

```
[
  {"role": "user", "content": "[ ]? (A) Sol (B) Helios (C) Sun"},
  {"role": "assistant", "content": "[ ] ("}
]
```

[] content [] "text"

```
{"role": "user", "content": "Hello, Claude"}
```

```
{
  "role": "user",
  "content": [{"type": "text", "text": "Hello, Claude"}]
}
```

[] Claude 3 []

```
{
  "role": "user",
```



```
}
```

???? (Image)

```
{
  "type": "image",          // type: "image"
  "source": {              // source
    "type": "base64",      // type: "base64"
    "media_type": "image/jpeg", // media_type: image/jpeg, image/png, image/gif, image/webp
    "data": "/9j/4AAQSkZJRg..." // data: base64 encoded image data
  },
  "cache_control": {
    "type": "ephemeral"    // type: "ephemeral"
  }
}
```

???? (Tool Use)

```
{
  "type": "tool_use",      // type: "tool_use"
  "id": "toolu_xyz...",    // id
  "name": "get_weather",   // name
  "input": {               // input
    // input_schema
  },
  "cache_control": {
    "type": "ephemeral"    // type: "ephemeral"
  }
}
```

???? (Tool Result)

```
{
  "type": "tool_result",   // type: "tool_result"
  "tool_use_id": "toolu_xyz...", // tool_use_id
  "content": "result",     // content
  "is_error": false,       // is_error
  "cache_control": {
    "type": "ephemeral"    // type: "ephemeral"
  }
}
```

content [REDACTED]

```

{
  "type": "tool_result",
  "tool_use_id": "toolu_xyz...",
  "content": [
    {
      "type": "text",      // type: "text"
      "text": "□□□□",    // text: "□□□□"
      "cache_control": {
        "type": "ephemeral" // type: "ephemeral"
      }
    },
    {
      "type": "image",    // type: "image"
      "source": {        // source: {}
        "type": "base64", // type: "base64"
        "media_type": "image/jpeg",
        "data": "..."
      },
      "cache_control": {
        "type": "ephemeral"
      }
    }
  ]
}

```

?? (Document)

```

{
  "type": "document",    // type: "document"
  "source": {           // source: {}
    // source
  },
  "cache_control": {
    "type": "ephemeral" // type: "ephemeral"
  }
}

```

□□□

1. □□□□□□□□□□ cache_control □□□□□□□□□□
2. □□□□□□□□□□ 1
3. □□□□ type □□□□□□□□□□

4. [] content [] / []

model

- []
- []

[] 1 - 256 []

metadata

- []
- []

[]

- user_id: [] uuid
[] 256

stop_sequences

- []
- []

[]

stream

- []
- []

[] (SSE) []

system

- []
- []

[] prompt [] Claude
[] role []
Messages API [] "system" []

temperature

- []
- []
- [] 1.0

0.0 - 1.0 $0 < x < 1$ / 0.0
1.0

temperature 0.0

? thinking

-
-

Claude 1,024 token max_tokens

1. ????

```
{  
  "type": "enabled",  
  "budget_tokens": 2048  
}
```

- type: "enabled"
- budget_tokens: Claude token ≥ 1024
max_tokens $x > 1024$

2. ????

```
{  
  "type": "disabled"  
}
```

- type: "disabled"

tool_choice

-
-

1. Auto ?? (????)

```
{  
  "type": "auto", // : "auto"
```



```

    "type": "custom",
    "name": "get_weather",
    "description": "날씨 정보 가져오기",
    "input_schema": {
      "type": "object",
      "properties": {
        "location": {
          "type": "string",
          "description": "위치, 예: 서울"
        }
      },
      "required": ["location"]
    }
  }
]

```

2. ????? (ComputerUseTool)

```

{
  "type": "computer_20241022", // ID
  "name": "computer",         // 이름: "computer"
  "display_width_px": 1024,   // 너비(픽셀)
  "display_height_px": 768,   // 높이(픽셀)
  "display_number": 0,        // 모니터 번호 (0부터 시작)
  "cache_control": {
    "type": "ephemeral"      // 캐시 제어
  }
}

```

3. Bash ?? (BashTool)

```

{
  "type": "bash_20241022",    // ID
  "name": "bash",             // 이름: "bash"
  "cache_control": {
    "type": "ephemeral"      // 캐시 제어
  }
}

```

4. ???????? (TextEditor)

- `input_tokens`: [] token [] $x > 0$
- `output_tokens`: [] token [] $x > 0$
- `cache_creation_input_tokens`: [] token [] ([]) [] $x > 0$
- `cache_read_input_tokens`: [] token [] ([]) [] $x > 0$

[] API [] token
 [] output_tokens
 []

????

[] API [] HTTP [] 4XX-5XX []

???????

- `401 Unauthorized`: API []
- `400 Bad Request`: []
- `429 Too Many Requests`: [] API []
- `500 Internal Server Error`: []

[] :

```
{
  "error": {
    "type": "invalid_request_error",
    "message": "Invalid API key provided",
    "code": "invalid_api_key"
  }
}
```

[] :

- `invalid_request_error`: []
- `authentication_error`: []
- `rate_limit_error`: []
- `server_error`: []