

## Pantallazos de comprobación funcionalidad API REST

- Prueba de carga y estado de API en Docker y en PowerShell. Uso de endpoint 'health'.

```
SSH
ssh ip172-18-0-10-d3cspp469qi000ai4dmg@direct.labs.play-with-

[DELETED] [EDITOR]

-rw-r--r-- 1 root root 973 Sep 29 00:30 Dockerfile
-rw-r--r-- 1 root root 7971 Sep 29 00:04 api.py
-rw-r--r-- 1 root root 1467 Sep 29 00:04 model_manifest.json
-rw-r--r-- 1 root root 761561 Sep 29 00:04 modelo_breastcancer.pkl
-rw-r--r-- 1 root root 108 Sep 29 00:41 requirements.txt
-rw-r--r-- 1 root root 2135 Sep 29 00:04 scaler.pkl
[nodet1] (local) root@192.168.0.29 ~
$ docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS          NAMES
4d89e66edea2   cancer-api     "gunicorn --bind 0.0.0.0" 21 minutes ago Up 21 minutes  0.0.0.0:80->8080/tcp cancer-container
[nodet1] (local) root@192.168.0.29 ~
$ curl http://localhost/health
{"manifest_loaded":true,"message":"Servicio activo y modelo cargado","model_loaded":true,"scaler_loaded":true,"status":"ok"}
[nodet1] (local) root@192.168.0.29 ~
$
```

```
PS C:\Users\HP>
PS C:\Users\HP> curl http://ip172-18-0-10-d3cspp469qi000ai4dmg-80.direct.labs.play-with-docker.com/health

StatusCode      : 200
StatusDescription : OK
Content         : {"manifest_loaded":true,"message":"Servicio activo y modelo cargado","model_loaded":true,"scaler_loaded":true,"status":"ok"}
RawContent      : HTTP/1.1 200 OK
                  Connection: close
                  Content-Length: 125
                  Content-Type: application/json
                  Date: Mon, 29 Sep 2025 00:58:17 GMT
                  Server: gunicorn

                  {"manifest_loaded":true,"message":"Servicio activo y m...
Forms           : {}
Headers         : {[Connection, close], [Content-Length, 125], [Content-Type, application/json], [Date, Mon, 29 Sep 2025 00:58:17 GMT]...}
Images          : {}
InputFields     : {}
Links           : {}
ParsedHtml      : mshtml.HTMLDocumentClass
RawContentLength : 125

PS C:\Users\HP> curl http://ip172-18-0-10-d3cspp469qi000ai4dmg-80.direct.labs.play-with-docker.com/model-info

StatusCode      : 200
StatusDescription : OK
Content         : {"best_hyperparameters":{"max_depth":5,"min_samples_leaf":2,"min_samples_split":2,"n_estimators":300},"created_at":"2025-09-28 20:08:37","cross_validation":{"best_score":0.9604246543511096,"metric":"a...
RawContent      : HTTP/1.1 200 OK
                  Connection: close
                  Content-Length: 1294
                  Content-Type: application/json
                  Date: Mon, 29 Sep 2025 00:58:37 GMT
                  Server: gunicorn

                  {"best_hyperparameters":{"max_depth":5,"min_samples_l...
Forms           : {}
Headers         : {[Connection, close], [Content-Length, 1294], [Content-Type, application/json], [Date, Mon, 29 Sep 2025 00:58:37 GMT]...}
Images          : {}
InputFields     : {}
Links           : {}
```

## - Prueba de endpoint 'model-info' en url.

The screenshot shows a web browser displaying the JSON response for the 'model-info' endpoint. The URL in the address bar is `http://ip172-18-0-10-d3cspp469qi000ai4dmg-80.direct.labs.play-with-docker.com/model-info`. The JSON response is expanded, showing the following structure:

```
{
  "best_hyperparameters": {
    "max_depth": 5,
    "min_samples_leaf": 2,
    "min_samples_split": 2,
    "n_estimators": 300,
    "created_at": "2025-09-28 20:08:37"
  },
  "cross_validation": {
    "best_score": 0.9604246543511096,
    "metric": "accuracy"
  },
  "features": {
    "0": "mean radius",
    "1": "mean texture",
    "2": "mean perimeter",
    "3": "mean area",
    "4": "mean smoothness",
    "5": "mean compactness",
    "6": "mean concavity",
    "7": "mean concave points",
    "8": "mean symmetry",
    "9": "mean fractal dimension",
    "10": "radius error",
    "11": "texture error",
    "12": "perimeter error",
    "13": "area error",
    "14": "smoothness error",
    "15": "compactness error",
    "16": "concavity error",
    "17": "concave points error",
    "18": "symmetry error"
  }
}
```

## - Prueba de estado y de predicción en POSTMAN

The screenshot shows the Postman interface with a GET request to the 'health' endpoint. The URL is `http://ip172-18-0-10-d3cspp469qi000ai4dmg-80.direct.labs.play-with-docker.com/health`. The request is sent, and the response is shown in the 'Body' tab. The response is a JSON object with the following structure:

```
{
  "manifest_loaded": true,
  "message": "Servicio activo y modelo cargado",
  "model_loaded": true,
  "scaler_loaded": true,
  "status": "ok"
}
```

The response status is 200 OK, with a response time of 509 ms and a body size of 271 B. The interface also shows the 'Headers' tab with 7 hidden headers and the 'Test Results' tab.

POST

http://ip172-18-0-10-d3cspp469qi000ai4dmg-80.direct.labs.play-with-docker.com/predict

Params Authorization Headers (10) Body • Scripts Settings

Body Cookies Headers (5) Test Results ↻

{ } JSON ▾ ▶ Preview 🖼 Visualize ▾

```
7   {
8       "class": 0,
9       "prediction": "malignant",
10      "probabilities": {
11          "benign": 0.06616704640388851,
12          "malignant": 0.9338329535961116
13      },
14      "sample": 0
15  },
16  {
17      "class": 1,
18      "prediction": "benign",
19      "probabilities": {
20          "benign": 0.9563819374526716,
21          "malignant": 0.04361806254732828
22      },
23      "sample": 1
24  }
```

```
1  {
2      "features": [
3          17.99, 10.38, 122.8, 1001.0, 0.1184, 0.2776, 0.3001, 0.1471, 0.2419, 0.07871,
4          1.095, 0.9053, 8.589, 153.4, 0.006399, 0.04904, 0.05373, 0.01587, 0.03003, 0.006193,
5          25.38, 17.33, 184.6, 2019.0, 0.1622, 0.6656, 0.7119, 0.2654, 0.4601, 0.1189
6      ]
7  }
```

Body Cookies Headers (5) Test Results ↻

{ } JSON ▾ ▶ Preview 🖼 Visualize ▾

```
1  {
2      "class": 0,
3      "class_mapping": {
4          "0": "malignant",
5          "1": "benign"
6      },
7      "prediction": "malignant",
8  }
```

- **Carga de yml en actions comprobando test y construcción de imagen Docker en GitHub**

Triggered via push 6 minutes ago

CristianRiquelmeF pushed [048f744](#) [main](#)

Status

Success

Total duration

1m 44s

Artifacts

1

ci.yml

on: push

test27s

build-and-push1m 11s

build-and-push summary

Docker Build summary

For a detailed look at the build, download the following build record archive and import it into Docker Desk  
Build records include details such as timing, dependencies, results, logs, traces, and other information about

[CristianRiquelmeF~api-breast-cancer~TE0OG1.dockerbuild](#) (58.2 KB - includes 1 build record)

Find this useful? [Let us know](#)

ID	Name	Status	Cached	Duration
TE0OG1	api-breast-cancer/Dockerfile.txt	completed	0%	49s

- **Carga de imagen en Docker**

```
4f4fB700ef54: Pull complete
Digest: sha256:83ad0a415477dc1e3643811c6d3b0f4aa58e22e14139707a8843208c63df0dbd
Status: Downloaded newer image for ghcr.io/cristianriquelmeF/api-breast-cancer:latest
ghcr.io/cristianriquelmeF/api-breast-cancer:latest
[node1] (local) root@192.168.0.29 ~
$
[node1] (local) root@192.168.0.29 ~
$ docker images
REPOSITORY                                TAG      IMAGE ID      CREATED        SIZE
ghcr.io/cristianriquelmeF/api-breast-cancer  latest   7eb557128b98  45 minutes ago 492MB
[node1] (local) root@192.168.0.29 ~
$
```

## - Prueba de estado

```
$ docker images
REPOSITORY                                TAG      IMAGE ID      CREATED        SIZE
ghcr.io/cristianriquelmef/api-breast-cancer  latest   7eb557128b98  51 minutes ago 492MB
[node1] (local) root@192.168.0.29 ~
$ docker run -d --name api-cancer -p 80:8080 ghcr.io/cristianriquelmef/api-breast-cancer:latest
c9650c61187ea19eaf6366618faadd9ea676fe0b415871cc81048dac0ca33593
[node1] (local) root@192.168.0.29 ~
$ docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STA
TUS           PORTS          NAMES
c9650c61187e   ghcr.io/cristianriquelmef/api-breast-cancer:latest "gunicorn --bind 0.0.0.0:80->8080/tcp" 36 seconds ago Up
36 seconds    0.0.0.0:80->8080/tcp api-cancer
[node1] (local) root@192.168.0.29 ~
$ curl http://localhost/health
{"manifest_loaded":true,"message":"Servicio activo y modelo cargado","model_loaded":true,"scaler_loaded":true,"status":"ok"}
[node1] (local) root@192.168.0.29 ~
$
```

## - Links

- Repositorio: <https://github.com/CristianRiquelmeF/api-breast-cancer>
- Última ejecución CI/CD: <https://github.com/CristianRiquelmeF/api-breast-cancer/actions>
- Imagen Docker en GHCR: <https://github.com/CristianRiquelmeF/api-breast-cancer/pkgs/container/api-breast-cancer>
- Archivo workflow: <https://github.com/CristianRiquelmeF/api-breast-cancer/blob/main/.github/workflows/ci.yml>