



# Data Sharing report

## Metadata:

**Article Title:** A single dose, BCG-adjuvanted SARS-CoV-2 vaccine induces Th1-polarized immunity and high-titre neutralizing antibodies in mice

**DOI:** 10.1101/2020.12.10.419044

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## DataSets:

### Dataset 1:

**Data Type:** tabular data - sample table

**Data Sentence:** Plasma was collected after centrifugation at 300 g for 10 min and remaining blood was resuspended in 1 mL of PBS Heparin 20 U / mL, stratified on top of Histopaque 10831 (Sigma-Aldrich, Missouri, USA) and PBMCs layer collected after gradient centrifugation.

**Status:** not shared

### Dataset 2:

**Data Type:** flow cytometry

**Data Sentence:** Samples were acquired on a BD LSR-Fortessa (BD), and analyzed using FlowJo TM analysis software (Treestar, USA).

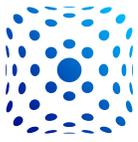
**Status:** not shared

### Dataset 3:

**Data Type:** tabular data - immunoassay

**Data Sentence:** The reaction was stopped with the addition of 2N H<sub>2</sub>SO<sub>4</sub> and absorbances were measured at 450 nm by the M1000 pro plate reader (Tecan, Männedorf, Switzerland).





**Status:** not shared

#### **Dataset 4:**

**Data Type:** image - microscopy

**Data Sentence:** Cell nuclei were stained and each well was imaged by a high-content fluorescence microscopy system (IN Cell Analyser 2500HS, Cytiva Life Sciences, Parramatta, .

**Status:** not shared

## Sharing guidelines:

This advice is drawn from our [Research Data Wiki](#) – you are welcome to add to or improve the guidelines there if need be. The most suitable repository advice shown here is tailored to your specific article, and is thus more specific than the repository advice on the wiki.

### Tabular Data – Sample Table:

#### **Description:**

A table describing the collection of samples, including times, dates, locations, and all other information collected about each sample.

#### **Best data format for sharing:**

A very thorough data dictionary is needed to accompany the data set to explain any data coding, categories, or other calculations. Column headings should describe the content of each column and contain only numbers, letters, and underscores – no spaces, or special characters. Lowercase letters are preferred. Row names should be consistent with those used in the article and in other related datasets.

#### **Most suitable Repositories:**

- [DataVerse](#)
- [Dryad](#)
- [Zenodo](#)
- [FigShare](#)





## Flow Cytometry:

### **Description:**

Technique using an instrument system for making, processing, and displaying one or more measurements on individual cells obtained from a cell suspension. Cells are usually stained with one or more fluorescent dyes specific to cell components of interest, e.g., DNA, and fluorescence of each cell is measured as it rapidly transverse the excitation beam (laser or mercury arc lamp). Fluorescence provides a quantitative measure of various biochemical and biophysical properties of the cell, as well as a basis for cell sorting. Other measurable optical parameters include light absorption and light scattering, the latter being applicable to the measurement of cell size, shape, density, granularity, and stain uptake.

### **Best data format for sharing:**

The data should be kept and shared in the original .fcs files, along with information about how gates were decided and applied.

### **Most suitable Repositories:**

- [Immunology Database and Analysis Portal](#)
- [FlowRepository](#)

## Tabular Data - Immunoassay

### **Description:**

A technique using antibodies for identifying or quantifying a substance. Usually the substance being studied serves as antigen both in antibody production and in measurement of antibody by the test substance.

### **Best data format for sharing:**

Raw output files should be provided as Tabular data including standard samples, negative controls, and test samples. Tabular data should be saved as a .txt or .csv file. The first row(s) should contain information about the dataset, such as the data file name, author, today's date, when the data within the file were last modified, and companion file names. Please also state which symbol has been used to denote missing data (NA is preferred). Column headings should describe the content of each column and contain only numbers, letters, and underscores - no spaces or special characters. Lowercase letters are preferred. Row names should be consistent with those used in the article and in other related datasets. You can check the formatting of tables with [goodtables.io](#).

### **Most suitable Repositories:**

- [plasmID](#)





- [PubChem](#)

## Image - Microscopy

### **Description:**

The use of instrumentation and techniques for visualizing material and details that cannot be seen by the unaided eye. It is usually done by enlarging images, transmitted by light or electron beams, with optical or magnetic lenses that magnify the entire image field. With scanning microscopy, images are generated by collecting output from the specimen in a point-by-point fashion, on a magnified scale, as it is scanned by a narrow beam of light or electrons, a laser, a conductive probe, or a topographical probe.

### **Best data format for sharing:**

Provide images or video taken through microscope, and any data collected while using the microscope as [tabular data](#).

### **Most suitable Repositories:**

- [Image Data Resource](#)
- [Cell Image Library](#)

## Tabular data

### **Description:**

Tabular data consist of a table with rows and columns. Each cell of the table contains numbers or text.

### **Best practice for sharing this type of data:**

Tabular data should be saved as a .txt or .csv file. The first row(s) should contain information about the dataset, such as the data file name, author, today's date, when the data within the file were last modified, and companion file names. Please also state which symbol has been used to denote missing data (NA is preferred). Column headings should describe the content of each column and contain only numbers, letters, and underscores - no spaces or special characters. Lowercase letters are preferred. Row names should be consistent with those used in the article and in other related datasets. You can check the formatting of tables with [goodtables.io](#).

### **Most suitable Repositories:**

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- [Zenodo](#)
- [FigShare](#)

