

Cancer Biology Kit – ELISA Lab – CA 27.29

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ELISA Test Lab - CA 27.29 Biomarker

This section contains information about the ELISA test. The ELISA is a test that can measure the presence of proteins. In this kit, the ELISA test is used to detect the presence of a protein called CA 27.29, which is a biomarker for breast cancer metastasis.

The materials include information about:

- the immune system
- antibody structure and function
- the ELISA test
- biomarkers
- the CA 27.29 protein
- uses of the ELISA test
- Instructions for assembling antibody models (developed by Science Education Partnership at FHCRC)
- Instructions for assembling ELISA models

It also includes the instructions for assembling antibody molecule models (developed by Science Education Partnership).

The 'Cancer Biology Sandwich ELISA Model Information' powerpoint contains the information necessary to assemble the ELISA models used in this curriculum.

A. ELISA Test Slide Decks

The 'ELISA Cancer Kit PowerPoint + Biomarker info' includes information about the immune system, antibodies, the ELISA test, biomarkers, the CA 27.29 protein, uses of the ELISA test. It also includes the instructions for assembling antibody molecule models (developed by Science Education Partnership).

The 'Cancer Biology Sandwich ELISA Model Information' powerpoint contains the information necessary to assemble the ELISA models used in this curriculum.

ELISA Cancer Kit PowerPoint + Biomarker info 2019.ppt

[Cancer](#) Biology Sandwich ELISA Model Information

B. ELISA Supporting Documents and Worksheets

Cancer Biology ELISA Teacher Preparation

Cancer Biology ELISA Plate Standard Curve and ODs

Cancer Biology ELISA Graphic Organizer/Venn Diagram Worksheet

ELISA Venn Diagram Key

ELISA Animations

C. ELISA Test Protocol

ELISA-Protocol-Cancer Kit

D. Standard Curve Graphing

Cancer Biology ELISA Plate Standard Curve and ODs

ELISA graphing for PC_Standard_Curve_Protocol

E. Antibody Recombination Activity Worksheets

Antibody Coloring Activity Word Doc

Antibody_Coloring_Activity_PPT

VDJ Recombination Model Graphic

VDJ_Antibody_Coloring_Activity

F. ELISA Test Virtual Data Sets

An ELISA virtual data set for all 12 'patients' (in duplicate) is available for teachers to use in teaching this kit content online. This data is available in two formats: ppt (editable) and pdf (non-editable).

Cancer Biology Kit ELISA Virtual Data Set rev 042021.pdf