

Al-Mustaqbal University College

Department of Medical Instrumentation Techniques Engineering

Class: 2nd

Subject: Clinical Chemistry

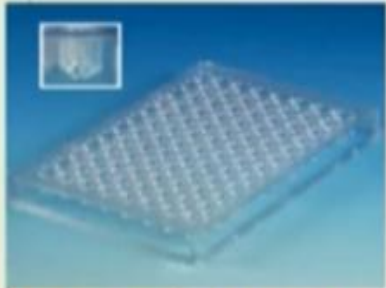
Lecturer: Prof.Salih H.Kadhim

No. : 15

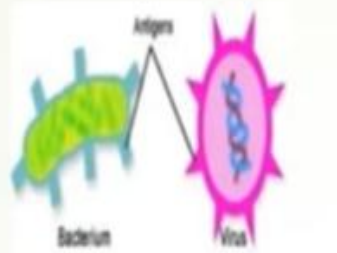


Elisa Instrument and its uses

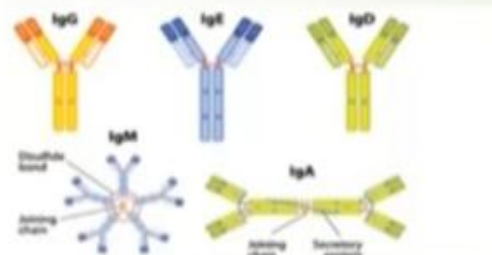
Abbreviation and Terms



96-well microtiter plate



Antigen (Microbes)



Antibody (IgG, IgM, IgA, IgE and IgD)



Micropipette



Serum



ELISA KIT



Conjugate (Ab labeled enzyme – Hors Radish Peroxidase/ Alkaline Phosphatase)

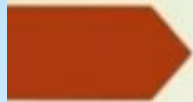


Elisa Washer

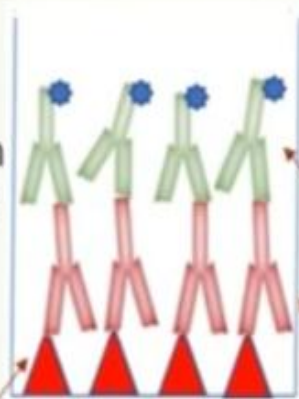


Elisa Reader

Indirect ELISA (Detection of Antibody)



Add serum to the well



Anti-Human IgG (HRP)

Coated Antigen (HBV)

Human Antibody IgG against (HBV)

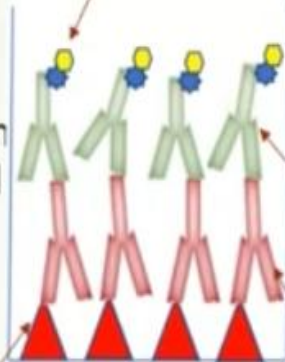
Indirect ELISA (Detection of Antibody)



Add serum
to the well



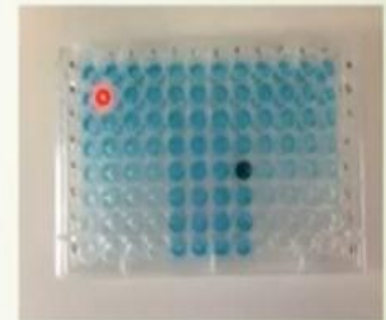
Substrate



Anti-Human IgG (HRP)

Human Antibody IgG
against (HBV)

Coated Antigen (HBV)



Equipments:

1) Microwell Plate:

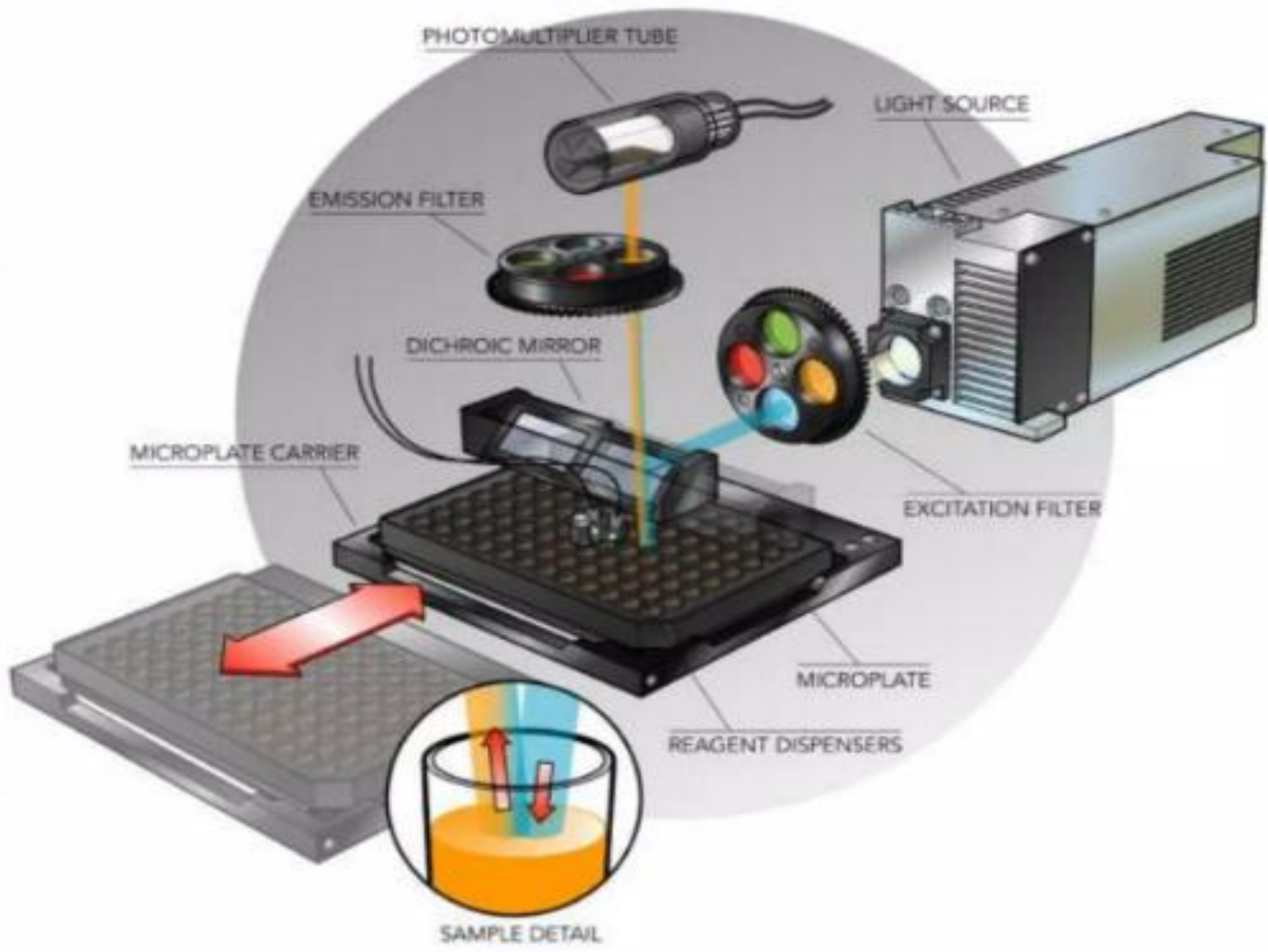
Flat bottom
polystyrene
plate,
contains 8 x 12
wells holding
350 μL each.

2) Multipipette :

An 8-channel 100 μL pipette is a good help for even small-scale work.



Semiautomated wash system



Measure the absorption at 450 nm by a plate reader.

Plate reader ▼





1	CAL1	0.017	0.00
1	CAL2	0.019	0.50
1	CAL3	0.068	2.50
1	CAL4	0.186	7.50
1	CAL5	0.383	20.00
1	CAL6	0.926	40.00
1	1S_	3.295	127.26

S