

ENDOCRINE SYSTEM

- Coordinating system which Influence metabolic rate , growth, development, acid base balance ,adaptation to stress, behavior etc
- Thomas Addison is the father of endocrinology
- Work in hand with nervous system.
- Neurohormones are produced by neurosecretary cells and released to neurohaemal organs.

REGULATING SYSTEMS

ENDOCRINE SYSTEM

- ✓ slow and long lasting response
- ✓ Transmitted through blood in the form of chemical messengers
- ✓ Hormones are involved

NERVOUS SYSTEM

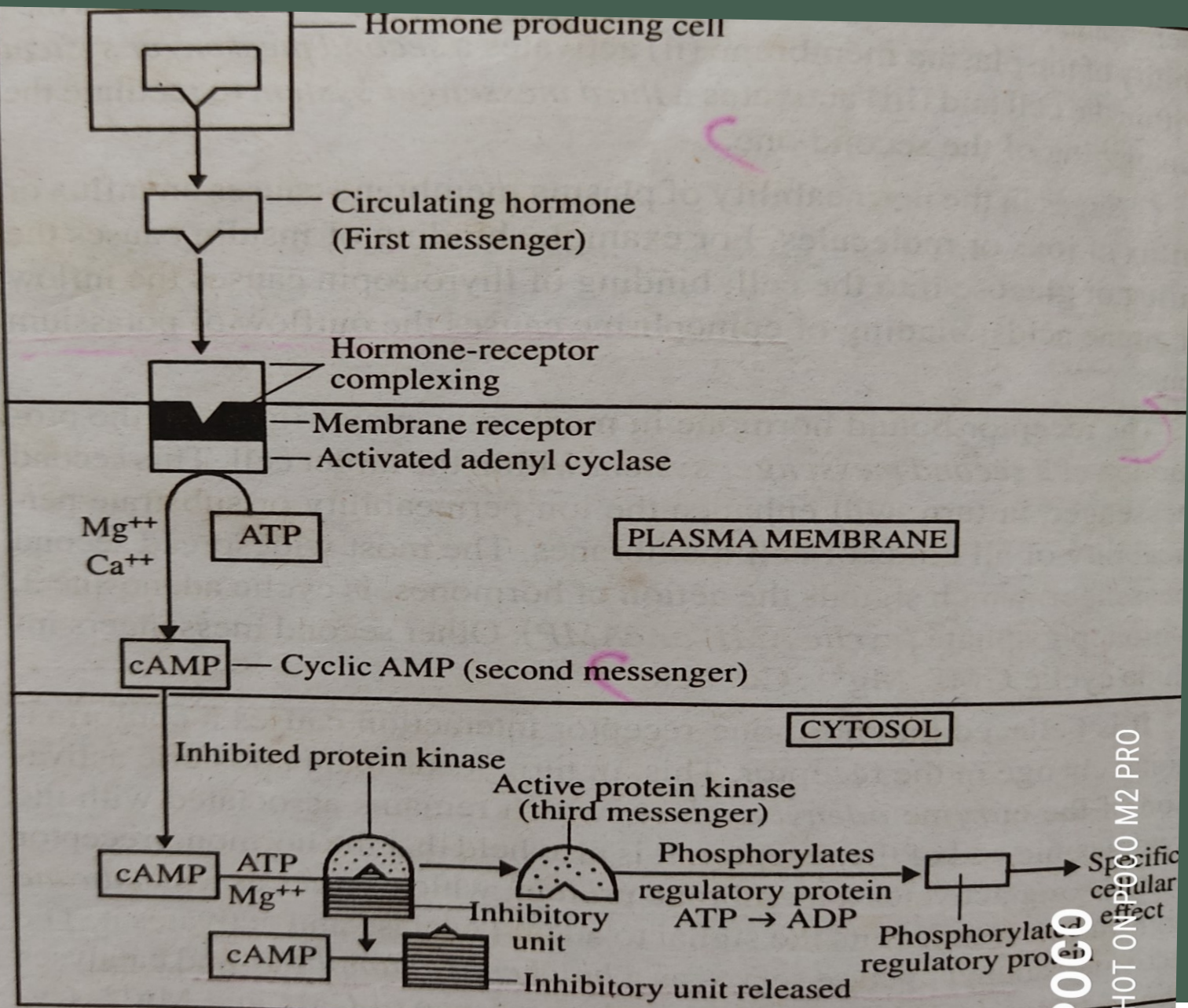
- ✓ fast and short living response
- ✓ Transmitted through neurons in the form of electro-chemical signals
- ✓ Neurotransmitters are involved

Features of hormones

- Organic molecules, chemical messengers/ informational molecules
- Chemically steroid/peptide/protein/catecholamines
- Bind with receptors in target tissues to form hormone -receptor complex
- Released by glands(exo/endo crine)
- 2 types : triggering and executive hormones

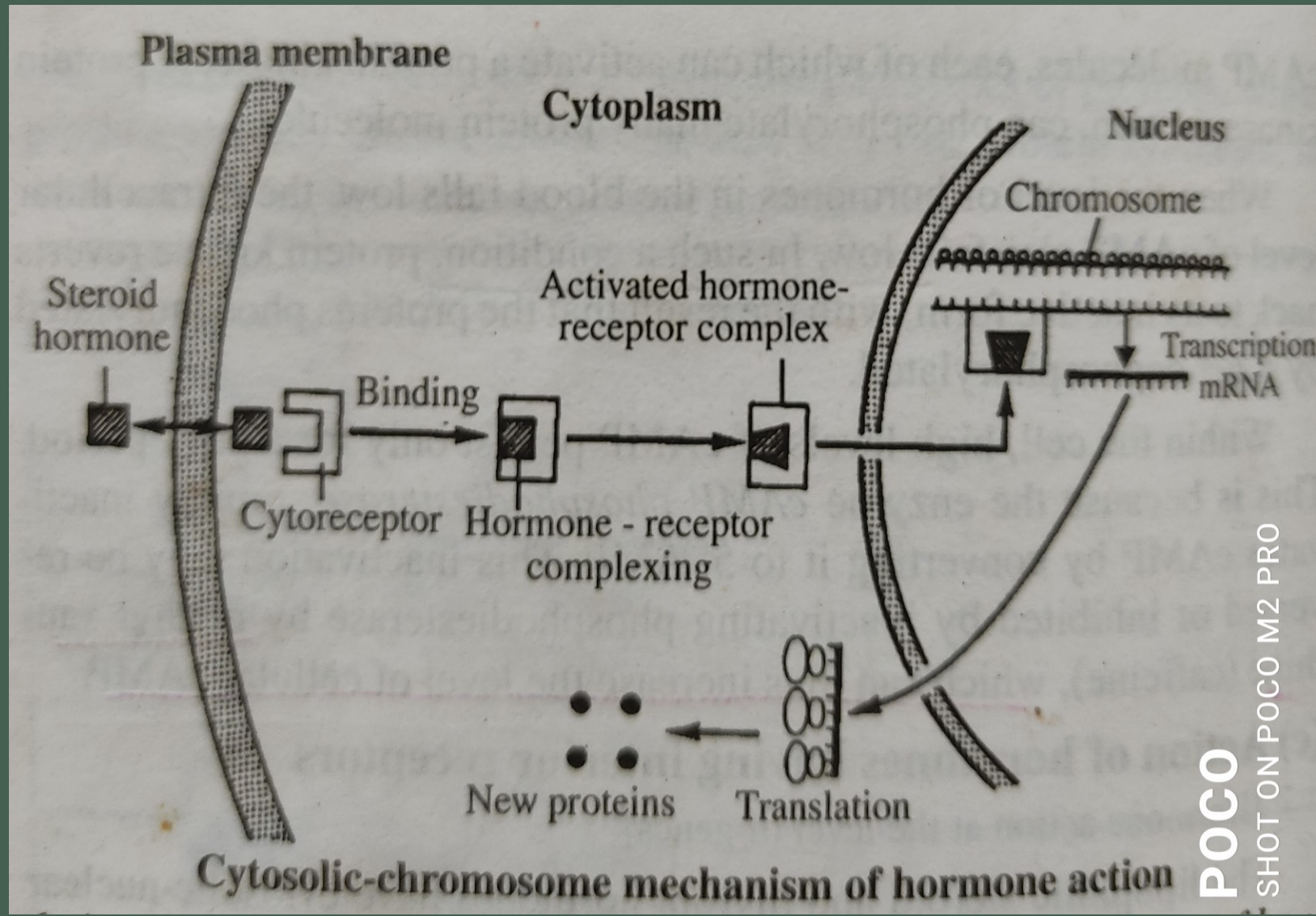
Effect Of Hormones On Target Cells

- ❖ either stimulate/inhibit the production of certain enzymes
- ❖ alter the activity of critical enzymes
- ❖ influence the action of enzymes
- ❖ effect on Multiunit enzyme
- ❖ Receptors are present on the membrane/intramembrane/cytosolic/nuclear
- ❖ Receptors of steroid hormones are present inside the cell that of peptide/proteinaceous hormones on the membrane.



Flow chart of the membrane-bound mechanism of hormone action

POCO SHOT ON POCO M2 PRO



POCO
SHOT ON POCO M2 PRO