

* Group I & Group II hormone

→ Group I → ^{Has} Intracellular receptor

- e.g.
- Glucocorticoid
 - Mineralocorticoid
 - Estrogen
 - Progesterone
 - Androgen
 - Calcitriol
 - Thyroxine
 - Retinoic acid
- } Cholesterol
(all steroid)
- } Tyrosine

→ Group II → Has cell surface receptor
- Has second messenger.

IIA - Second messenger

CAMP
GPCR

Example

- | | |
|------|---------------|
| ACTH | hCG |
| PTH | ADA |
| CRH | MSH |
| FSH | glucagon |
| LH | Calcitonin |
| TSH | Catecholamine |

IIB - cGmp

ANF - atrial natriuretic factor
NO - nitric oxide

IIC - Calcium or
PIP₂ - phosphatidylinositol

TRH, CCK, gastrin, oxytocin, vasopressin
Acetylcholine, GnRH

IID - Tyrosine kinase

Insulin, IGF, PDGF
EGF, FGF,

IE - Messenger-kinase or utilize phosphate cascade

IL, GH, PRL, TNF
Leptin, resistin, erythropoietin, celineptin