

抗体

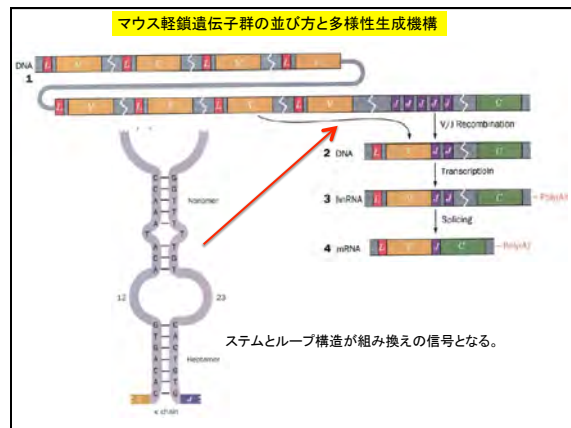
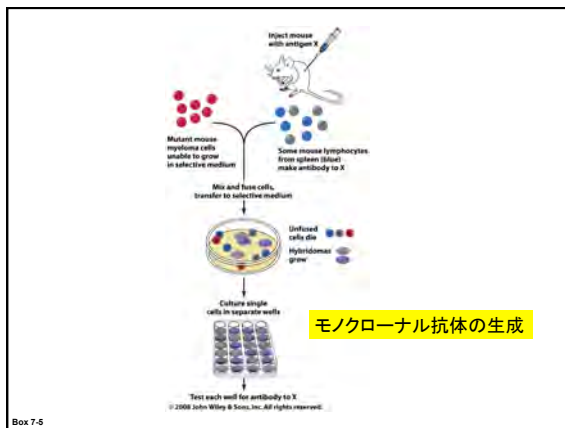
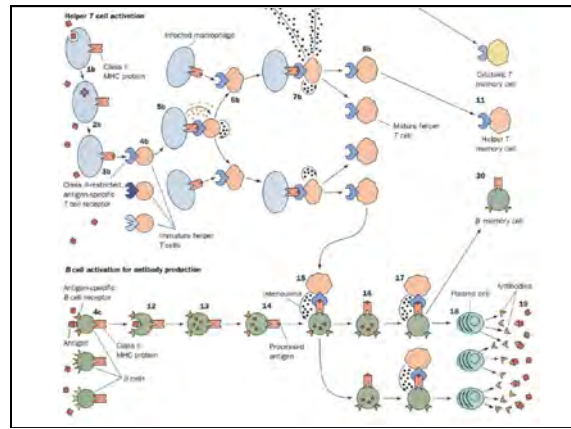
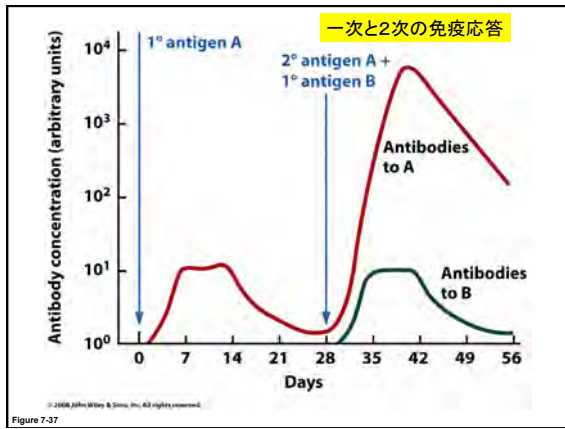
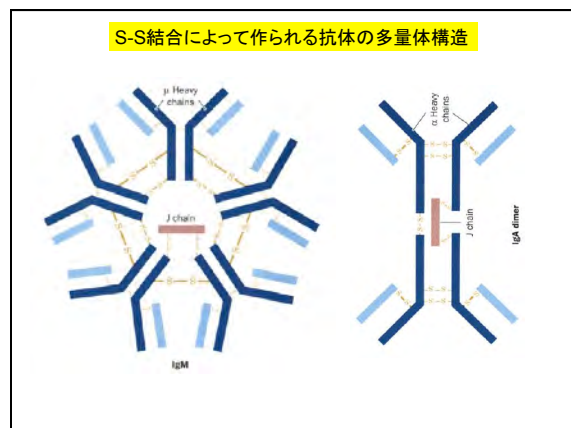


Table 7-2 Classes of Human Immunoglobulins

Class	Heavy Chain	Light Chain	Subunit Structure	Molecular Mass (kD)
IgA	α	κ or λ	(α ₂ κ ₂) ₂ J ^H or (α ₂ λ ₂) ₂ J ^H	360-720
IgD	δ	κ or λ	δ ₂ κ ₂ or δ ₂ λ ₂	160
IgE	ε	κ or λ	ε ₂ κ ₂ or ε ₂ λ ₂	190
IgG ^b	γ	κ or λ	γ ₂ κ ₂ or γ ₂ λ ₂	150
IgM	μ	κ or λ	(μ ₂ κ ₂) ₂ J ^H or (μ ₂ λ ₂) ₂ J ^H	950

^an = 1, 2, or 3.
^bIgG has four subclasses, IgG1, IgG2, IgG3, and IgG4, which differ in their γ chains.

Table 7-2



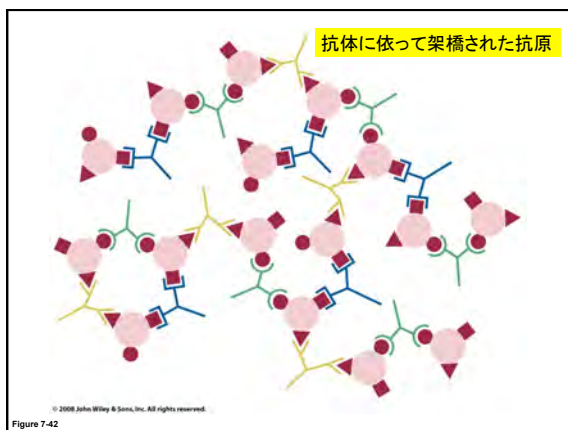
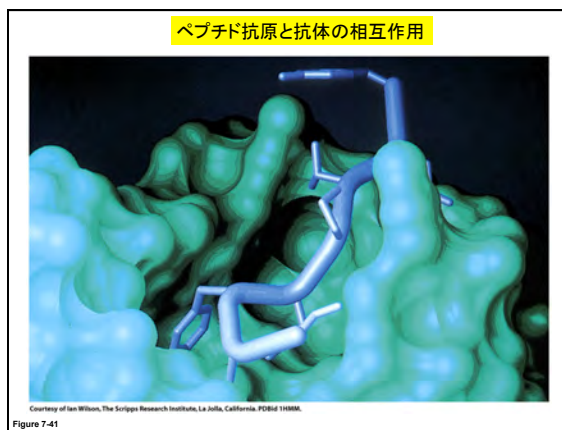
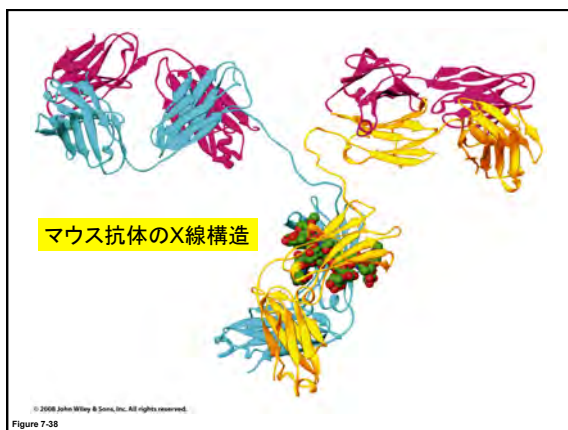
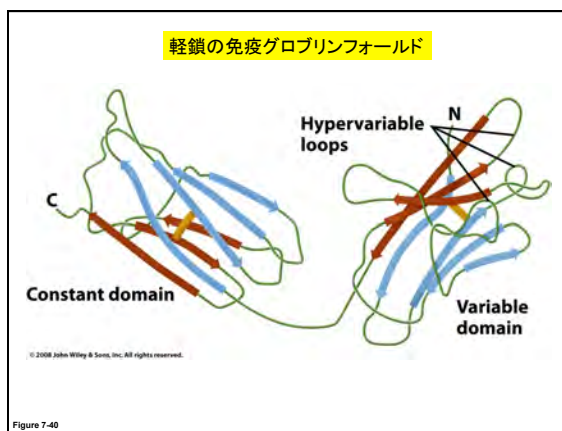
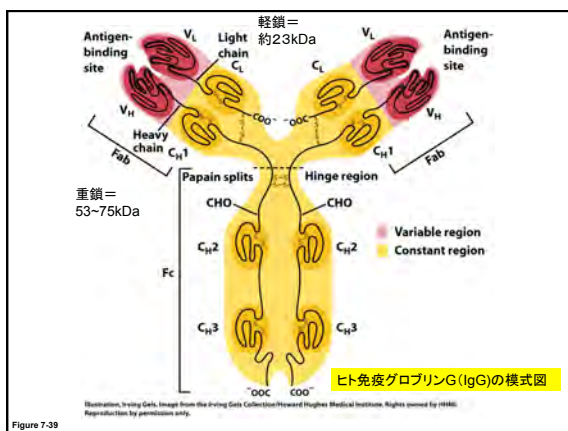


Table 7-3 Some Autoimmune Diseases

Disease	Target Tissue	Major Symptoms
Addison's disease	Adrenal cortex	Low blood glucose, muscle weakness, Na ⁺ loss, K ⁺ retention, increased susceptibility to stress
Crohn's disease	Intestinal lining	Intestinal inflammation, chronic diarrhea
Graves' disease	Thyroid gland	Oversecretion of thyroid hormone resulting in increased appetite accompanied by weight loss
Insulin-dependent diabetes mellitus	Pancreatic β cells	Loss of ability to make insulin
Multiple sclerosis	Myelin sheath of nerve fibers in brain and spinal cord	Progressive loss of motor control
Myasthenia gravis	Acetylcholine receptors at nerve-muscle synapses	Progressive muscle weakness
Psoriasis	Epidermis	Hyperproliferation of the skin
Rheumatoid arthritis	Connective tissue	Inflammation and degeneration of the joints
Systemic lupus erythematosus	DNA, phospholipids, other tissue components	Rash, joint and muscle pain, anemia, kidney damage, mental dysfunction

Figure 7-3