



PHARMACOLOGY

# Monoclonal Antibody Naming Conventions

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# ACTIVE LEARNING

**Biologic products** are created with biotechnology and encompass blood components, somatic cells, gene therapy, tissues, recombinant proteins, and vaccines. They are derived from microorganisms, plant, animal, or human cells.

**Monoclonal antibodies** are a large subset of biologics.

Aducanumab is a monoclonal antibody used to treat Alzheimer Disease. Based on its name, what is the target and source species of aducanumab?



# MONOCLONAL ANTIBODY NOMENCLATURE

Name Component	Meaning
Prefix	Random, should contribute to distinctive name
Substem A	Target class
Substem B	Species
Suffix	-mab (for <b>mon</b> oclonal <b>anti</b> body)

Target Class	Substem A
Bacterial	-b(a), -ba(c)
Serum amyloid protein	-am(i)
Cardiovascular	-c(i), -ci(r)
Fungal	-f(u), -fung
Skeletal muscle related growth factors	-gr(o)
Interleukin	-k(i), -ki(n)
Immunomodulating	-l(i), -li(m)
Neural	-n(e)
Bone	-s(o), -os
Toxin	-tox(a)
Tumor	-t(u)
Viral	-v(i), -vi(r)

Source Species	Substem B
Rat	a
Rat/mouse	axo
Hamster	e
Primate	i
Mouse	o
Human	u
Chimeric	xi
Chimeric/humanized	xizu
Humanized	zu



# ADUCANUMAB

Name Component	Meaning	Adalimumab Example	
Prefix	Random, should contribute to distinctive name	Aduca	Random
Substem A	Target class	-n	Neuro
Substem B	Species	-u	Human
Suffix	-mab (for <b>monoclonal antibody</b> )	-mab	Monoclonal antibody



# ACTIVE LEARNING

Adalimumab and infliximab are two monoclonal antibodies. Based on their names, what is the target and source species of adalimumab and infliximab?

Ustekinumab (Stelara) is commonly used monoclonal antibody. Based on its name, what is the target and source species?



# ADALIMUMAB

Name Component	Meaning	Adalimumab Example	
Prefix	Random, should contribute to distinctive name	Ada	Random
Substem A	Target class	-lim	immunomodulating
Substem B	Species	-u	Human
Suffix	-mab (for <b>monoclonal antibody</b> )	-mab	Monoclonal antibody



# INFLIXIMAB

Name Component	Meaning	Adalimumab Example	
Prefix	Random, should contribute to distinctive name	Inf	Random
Substem A	Target class	-li	immunomodulating
Substem B	Species	-xi	Chimeric
Suffix	-mab (for <b>monoclonal antibody</b> )	-mab	Monoclonal antibody





# USTEKINUMAB

Name Component	Meaning	Adalimumab Example	
Prefix	Random, should contribute to distinctive name	Uste	Random
Substem A	Target class	-kin	interleukin
Substem B	Species	u	Humanized
Suffix	-mab (for <b>monoclonal antibody</b> )	-mab	Monoclonal antibody

Ustekinumab (Stelara) is a fully human monoclonal antibody that targets interleukin-12 and -23