The growth cone collapsing activity of semaphorins
Semaphorins and their receptors
Invertebrate plexins
A B
Invertebrate semaphorins
1 2

Vertebrate plexins
A B C D
Vertebrate and virus-encoded semaphorins
C C C
3 4 5 6 7 V

Scatter factor receptors

Neuropilins

sema domain
MRS
G-PIPT motif

Convertase cleavage site
Ig loop
Thrombosp.
domain
GPI-anchor

Tyrosine kinase domain
SP domain
CUB (a1/a2) domains
Coagulation-factor homology (b1/b2) domains
MAM (c) domain
Models for comm action on robo
Robo::GFP

Keleman et al., 2005

Robo::GFP + Comm
Ephrins and their receptors
Gradients of Ephrins and Eph receptors

McLaughlin, T and O’Leary DD. 2005
3/21
Axon guidance lecture
Class discussion
(Keleman et al., 2002)

3/24
Presentation
(Wang et al., 1998)
Neurotrophins lecture
QUIZ
(differentiation, axon guidance)

3/28
Neurotrophins lecture
Class discussion
(Lee et al., 2001)