

Fields of Research for Angiogenesis Products

- Oncology
- Gynaecology
- Diabetes
- Ophthalmology
- Wound Repair
- Tissue Engineering
- Psoriasis

Key Factors in Angiogenesis and Lymphangiogenesis

- Growth Factors/Receptors:

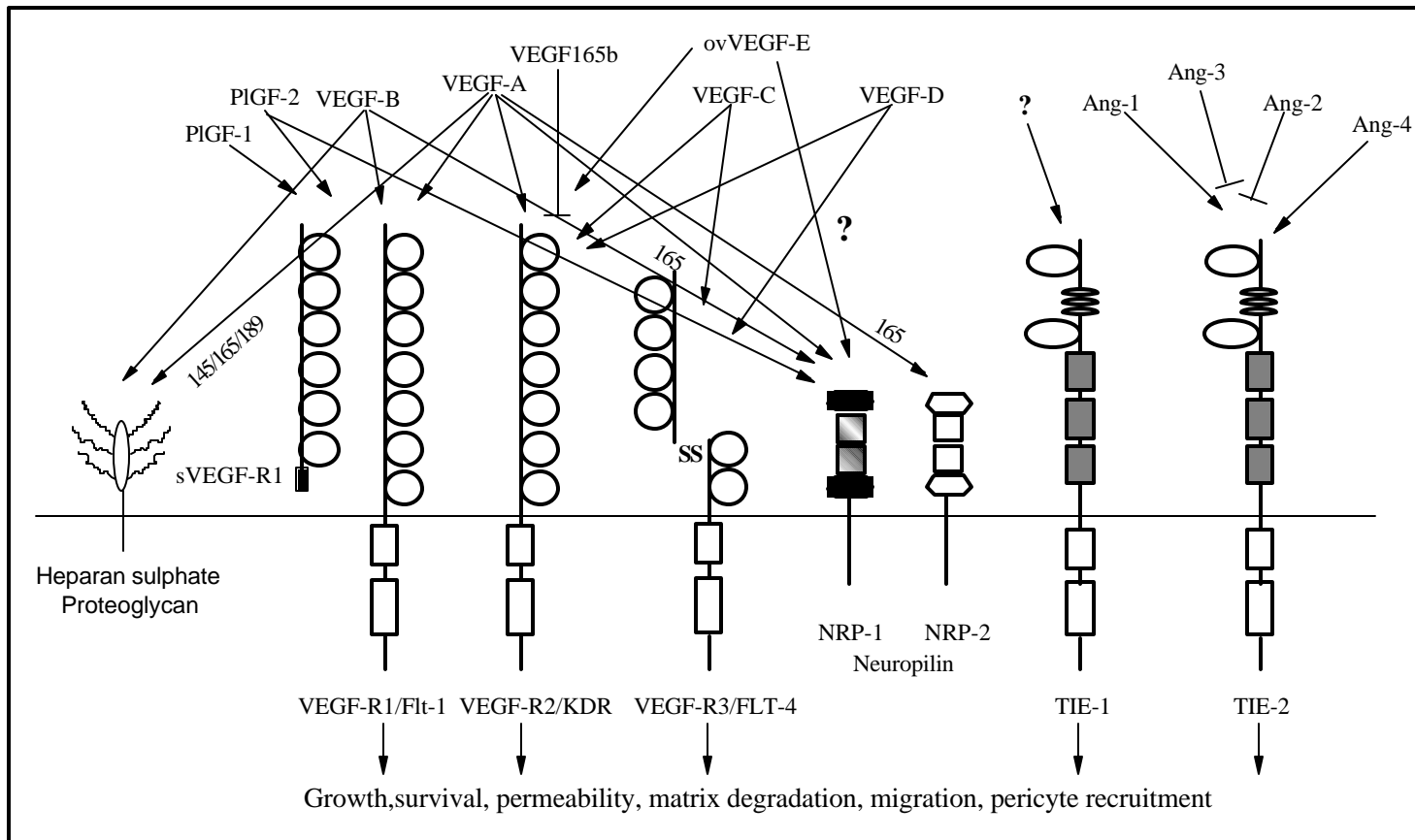
VEGF-A	VEGFR-1/Flt-1, VEGFR-2/KDR
VEGF-C	VEGFR-3/FLT-4
PlGF-1/-2	VEGFR-1/Flt-1
Angiopoietin-1/-2	TIE-2
?	TIE-1
FGF-2 (basic)	FGFR-1/-2/-4

- Soluble Receptors as natural antagonists:

sVEGFR-1/sFlt-1	<u>for</u>	VEGF-A, PlGF-1/-2
sTIE-1		unknown
sTIE-2		Angiopoietin-1/-2

Complexity of binding affinities:

Endothelial-specific receptor tyrosine kinases and their ligands



RELIA*Tech*'s Tools for Angiogenesis research:

Ligands:

h VEGF121

h VEGF145*

h VEGF165

h VEGF189*

r VEGF-C

r VEGF-C152S

r VEGF-D*

ov-VEGF-E

h PlGF-1

h PlGF-2

h Ang-1

h Ang-2

h FGF-2 (basic)

Soluble Receptors:

h sFlt-1/sVEGFR-1

h sKDR/sVEGFR-2

h sFLTt-4/sVEGFR-3

h sTIE-1

h sTIE-2

h sFGFR-1

h sFGFR-2

h sFGFR-4

ELISAs:

h sVEGFR-1

hVEGF-A "RELIDA"

hVEGF-A

VEGF-C

h sVEGFR-3*

Antibodies:

anti-hVEGF-A (pab)

anti-VEGF-C (pab)

anti-VEGF-D (pab)

anti-hPlGF (pab)

anti-hFGF-2 (pab)

anti-hFlt-1/VEGFR-1 (pab)

anti-hKDR/VEGFR-2 (pab)

anti-hFLT4/VEGFR-3 (pab)

anti-hFLT-1/VEGFR-1 (mab)

anti-hKDR/VEGFR-2 (mab)

anti-hPodoplanin (pab)

anti-hProx-1 (pab)

anti-hLyve-1 (pab)

anti-mLyve-1 (pab)

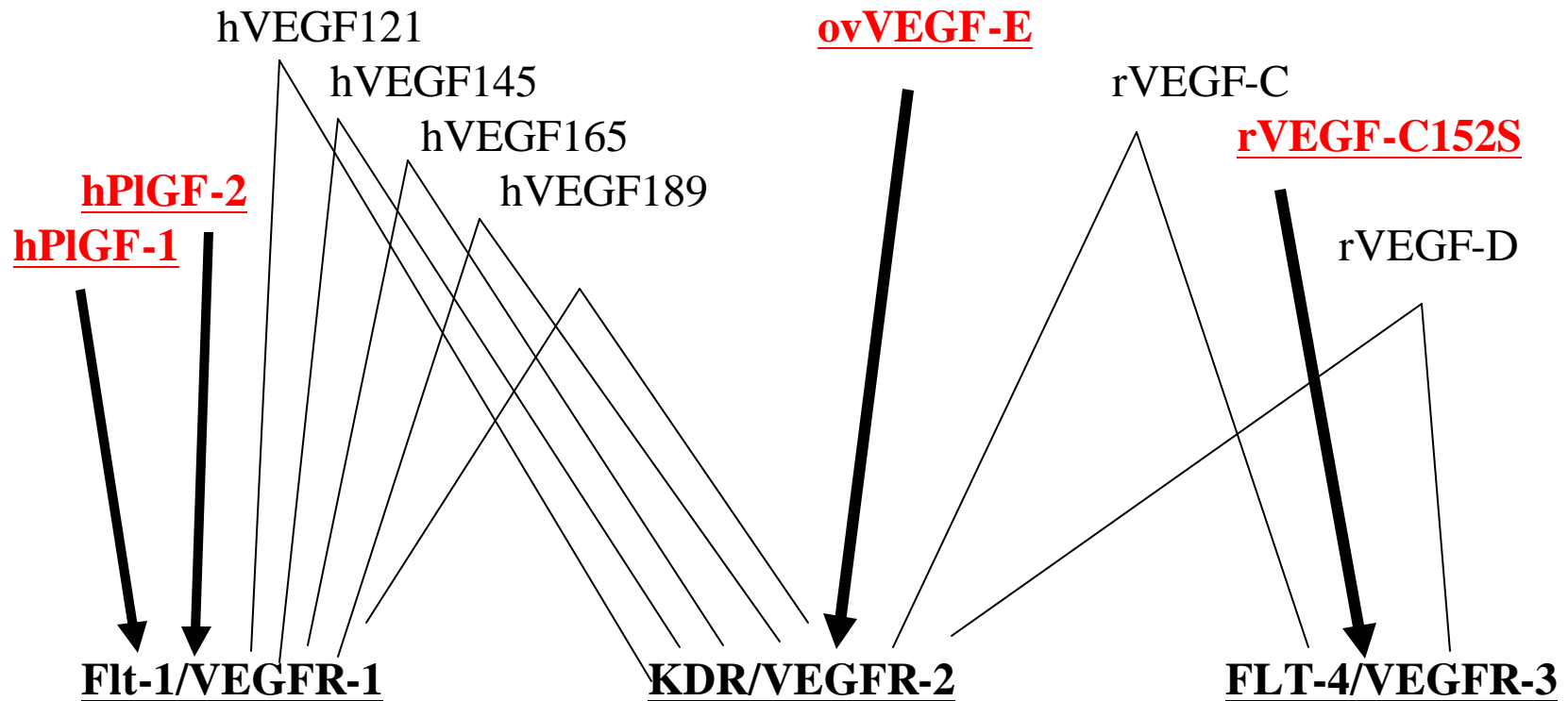
anti-mPodoplanin (mab)

anti-hPodoplanin (mab)

[VEGF-A: VEGF121/145/165/189]

*** Product under development!**

VEGF/VEGF Receptor System: Relation ship between ligands and receptors



rVEGF-C152: mutated protein!