

Figure 1**Figure 1a. Sequence of the human proNGF (SEQ ID NO: 1)**

MEPHSESNVPAGHTIPQVHWTKLQHSLDTALRRARSAPAAAIAARVAGQTRNITVDPRLFKKRRRLSPRVLFST
 QPPREAADTQDLDFEVGGAAPFNRTHRSKRSSSHPIFHRGEFSVCDSVSVWVGDKTTATDIKGKEVMVLGEVNIN
 NSVFKQYFFETKCRDPNPVDSGCRGIDSKHWNSYCTTTHTFVKALTMGKQAAWRFIRIDTACVCVLSRKAVR

Figure 1b. Sequence of a proNGF mutant of the invention (SEQ ID NO: 2)

MEPHSESNVPAGHTIPQVHWTKLQHSLDTALRRARSAPAAAIAARVAGQTRNITVDPRLFKKRRRLSPRVLFST
 QPPREAADTQDLDFEVGGAAPFNRTHVSXRSSSHPIFHRGEFSVCDSVSVWVGDKTTATDIKGKEVMVLGEVNI
 NNSVFKQYFFETKCRDPNPVDSGCRGIDSKHWNSYCTTTHTFVKALTMGKQAAWRFIRIDTACVCVLSRKAVR

Figure 1c. Sequence of a proNGF mutant of the invention (SEQ ID NO: 3)

MEPHSESNVPAGHTIPQVHWTKLQHSLDTALRRARSAPAAAIAARVAGQTRNITVDPRLFKKRRRLSPRVLFST
 QPPREAADTQDLDFEVGGAAPFNRTHXSXRSSSHPIFHRGEFSVCDSVSVWVGDKTTATDIKGKEVMVLGEVNIN
 NSVFKQYFFETKCRDPNPVDSGCRGIDSKHWNSYCTTTHTFVKALTMGKQAAWRFIRIDTACVCVLSRKAVR

Figure 1d. Sequence of a proNGF mutant of the invention (SEQ ID NO: 4)

MEPHSESNVPAGHTIPQVHWTKLQHSLDTALRRARSAPAAAIAARVAGQTRNITVDPRLFKKRRRLSPRVLFST
 QPPREAADTQDLDFEVGGAAPFNRTHXSARSSSHPIFHRGEFSVCDSVSVWVGDKTTATDIKGKEVMVLGEVNIN
 NSVFKQYFFETKCRDPNPVDSGCRGIDSKHWNSYCTTTHTFVKALTMGKQAAWRFIRIDTACVCVLSRKAVR

Figure 1e. Sequence of proNGF mutant SP174-101 (SEQ ID NO: 5)

MEPHSESNVPAGHTIPQVHWTKLQHSLDTALRRARSAPAAAIAARVAGQTRNITVDPRLFKKRRRLSPRVLFST
 QPPREAADTQDLDFEVGGAAPFNRTHVSARSSSHPIFHRGEFSVCDSVSVWVGDKTTATDIKGKEVMVLGEVNIN
 NSVFKQYFFETKCRDPNPVDSGCRGIDSKHWNSYCTTTHTFVKALTMGKQAAWRFIRIDTACVCVLSRKAVR

Figure 1f. Sequence of a proNGF mutant of the invention (SEQ ID NO: 7)

MEPHSESNVPAGHTIPQVHWTKLQHSLDTALRRARSAPAAAIAARVAGQTRNITVDPRLFKKRRRLSPRVLFST
 QPPREAADTQDLDFEVGGAAPFNRTHXXXRSSSHPIFHRGEFSVCDSVSVWVGDKTTATDIKGKEVMVLGEVNIN
 NSVFKQYFFETKCRDPNPVDSGCRGIDSKHWNSYCTTTHTFVKALTMGKQAAWRFIRIDTACVCVLSRKAVR

Figure 1g. Sequence of a proNGF mutant of the invention (SEQ ID NO: 8)

MEPHSESNVPAGHTIPQVHWTKLQHSLDTALRRARSAPAAAIAARVAGQTRNITVDPRLFKKRRRLSPRVLFST
 QPPREAADTQDLDFEVGGAAPFNRTHVXARSSSHPIFHRGEFSVCDSVSVWVGDKTTATDIKGKEVMVLGEVNI
 NNSVFKQYFFETKCRDPNPVDSGCRGIDSKHWNSYCTTTHTFVKALTMGKQAAWRFIRIDTACVCVLSRKAVR

Figure 1h. Further protease cleavage sites

RXKR (SEQ ID NO: 6); RSKR (SEQ ID NO: 9); VSXR (SEQ ID NO: 10); XSXR (SEQ ID NO: 11); XSAR (SEQ ID NO: 12); VSAR (SEQ ID NO: 13); XXXR (SEQ ID NO: 14); VXAR (SEQ ID NO: 15).

Figure 2. Processing of proNGF or proNGF mutants to beta-NGF

Figure 2a. Processing of wild-type proNGF

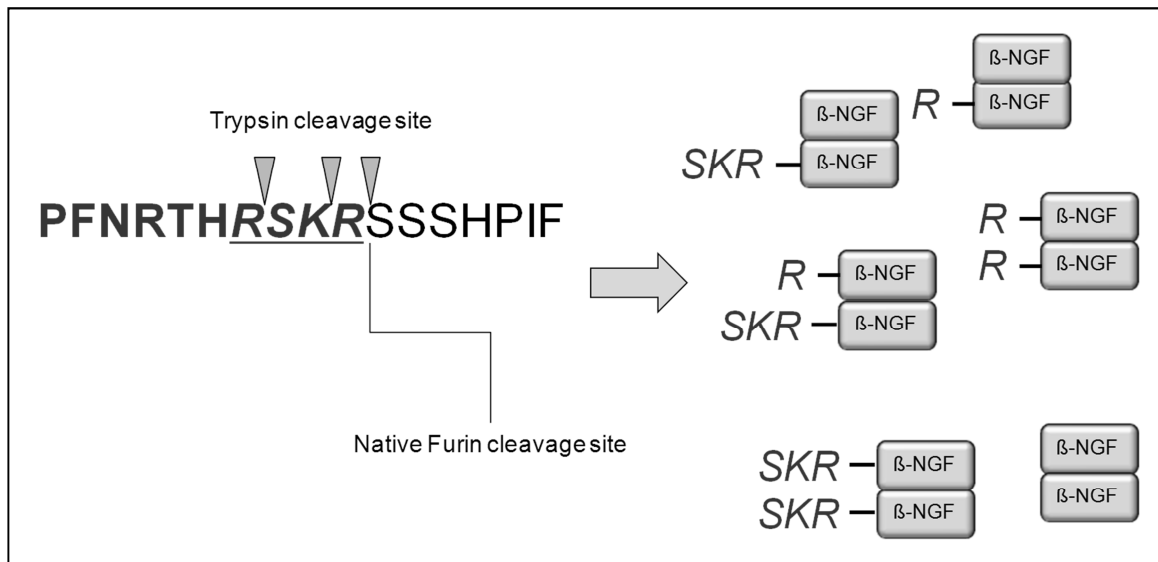


Figure 2b. Processing of proNGF mutant SP174-101 (SEQ ID NO: 5)

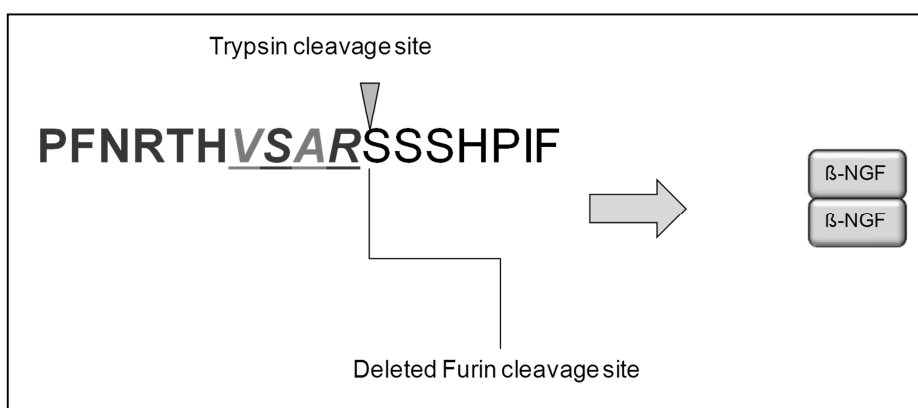


Figure 3. Refolding of proNGF mutant SP174-101

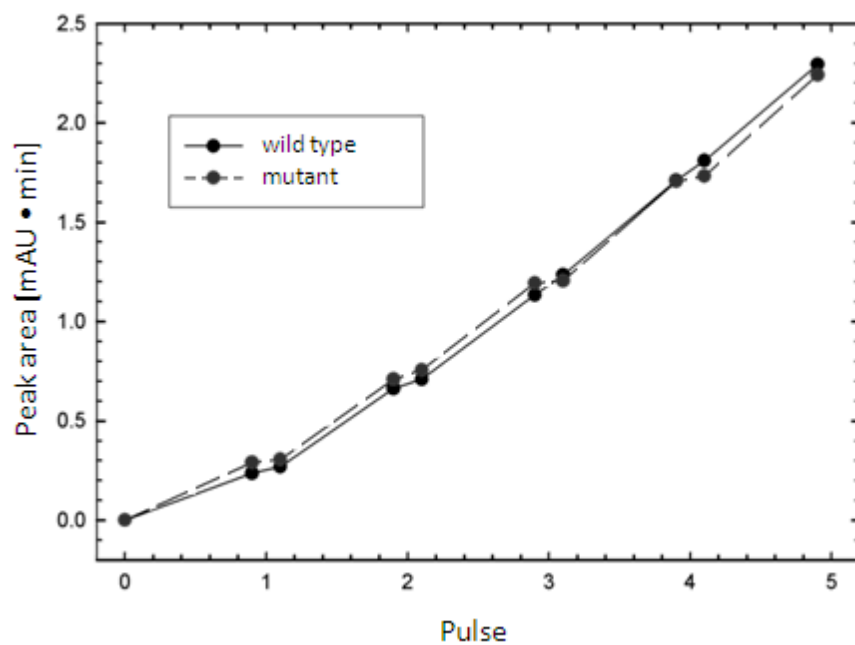


Figure 4. Purification of proNGF SP174-101 by a MEP column

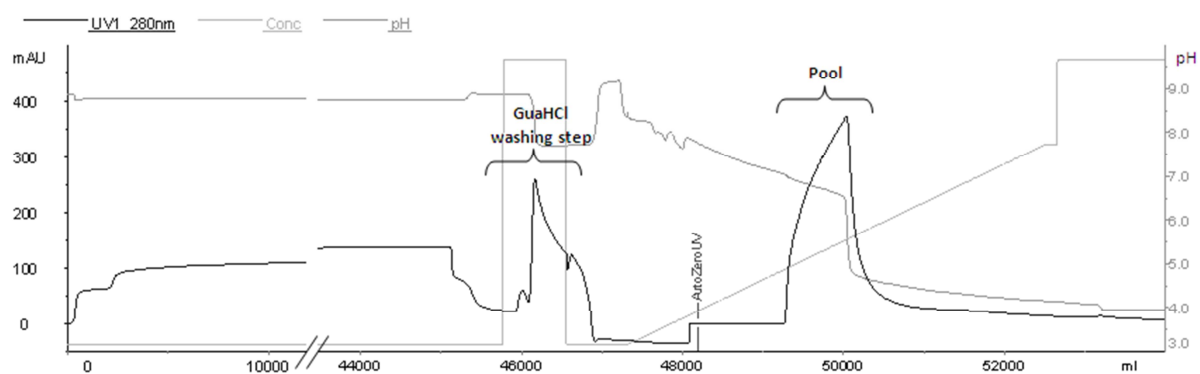


Figure 5. Cleaving proNGF mutant SP174-101 to obtain active beta-NGF

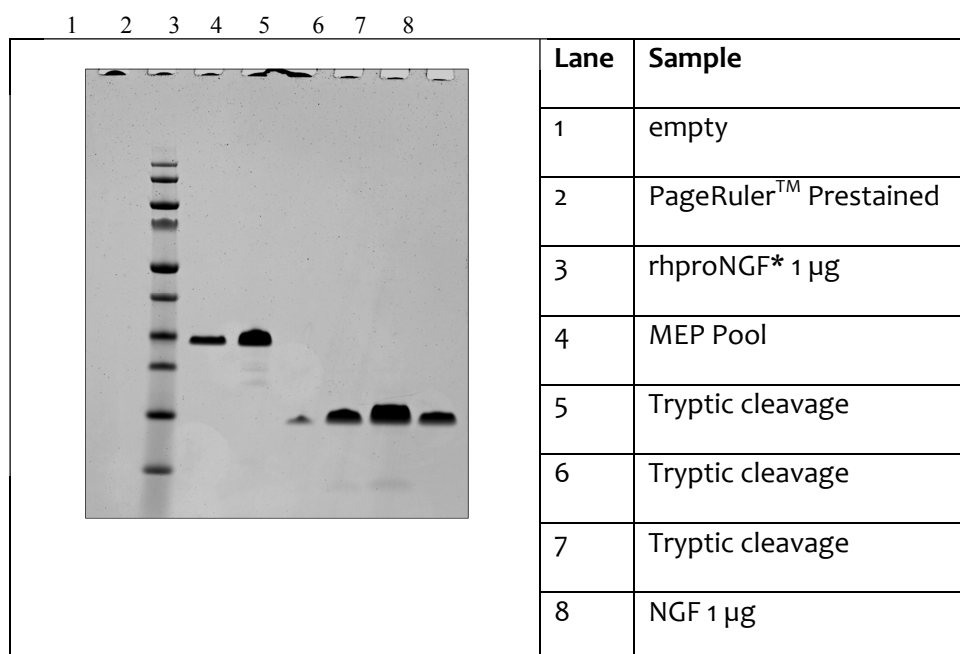


Figure 6. Purification of beta-NGF by SP Sepharose HP chromatography.

