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(21) International Application Number: PCT/US97/16191 (22) International Filing Date: 11 September 1997 (11.09.97) (30) Priority Data: 60/025,923 11 September 1996 (11.09.96) US (71) Applicant: ORTHO PHARMACEUTICAL CORPORATION [US/US]; U.S. Route #202, Raritan, NJ 08869-0602 (US). (72) Inventors: ERLANDER, Mark; 442 Hillcrest Drive, Encinitas, CA 92024 (US). HUANG, Shaoming; 12715 Camerena Road, Del Mar, CA 92130 (US). JACKSON, Michael; 12728 Via Felino, Del Mar, CA 92014 (US). PETERSON, Per; 1 Pine Court, Bedminster, NJ 07921 (US). (74) Agents: CIAMPORCERO, Audley et al.; Johnson & Johnson, One Johnson & Johnson Plaza, New Brunswick, NJ 08933- 7003 (US).			(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: TNF-BETA-LIKE PROTEIN FOR TREATING PROSTATE CANCER, AND RELATED NUCLEIC ACID MOLECULES, PHARMACEUTICAL COMPOSITIONS AND METHODS

NUCLEOTIDE SEQUENCE OF GF-2H

1	CGAGTCCCAG	CTCTGAGCCG	CAACCTGCAC	AGCGATGCCC	GGGCAAGAAC
51	TCAGGACGCT	GAATGGCTCT	CAGATGCTCC	TGGTGTTCCT	GGTGCTCTCG
101	TGGCTGCCGC	ATGGGGGCGC	CCTGTCTCTG	GCCGAGGCGA	GCCGCGCAAG
151	TTTCCCAGGA	CCCTCAGAGT	TGCACTCCGA	AGACTCCAGA	TTCCGAGAGT
201	TGCGGAAACG	CTACGAGGAC	CTGCTAACCA	GGCTGCGGGC	CAACGAGAGC
251	TGGGAAGATT	CGAACACCGA	CCTCGTCCCG	GCCCTGCAG	TCCGGATACT
301	CACGCCAGAA	GTGCGGCTGG	GATCCGGCCG	CCACCTGCAC	CTGCGTATCT
351	CTCGGGCCGC	CCTTCTCTGC	GGGCTCCCCG	AGGCCTCCCG	CCTTACCCTG
401	GCTCTGTTCC	GGCTGTCCCC	GACGGCGTCA	AGGTGCTGGG	ACGTGACACG
451	ACCGCTGCGG	CGTCAAGTCA	GCCTTGCAAG	ACCCGAGGCG	CCCGCGCTGC
501	ACCTGCGACT	GTGCGCGCCG	CCGTGCGCAGT	CGGACCAACT	GCTGGAGAGC
551	TCTTCGTCCG	CACGGCCCCA	GCTGGAGTTG	CACTTGCGGC	CGCAAGCCGC
601	CAGGGGGCGC	CGCAGAGCGC	GTGCGCGCAA	CGGGGACAC	TGTCCGCTCG
651	GGCCCGGCGC	TTGCTGCCGT	CTGCACACGG	TCCGCGCGTC	GCTGGAAGAC
701	CTGGGCTGGG	CCGATTGGGT	GCTGTGCGCA	CGGGAGGTGC	AAGTGACCAT
751	GTGCATCGGC	GCGTGCCCCG	GCCAGTTCCG	GGCGGCAAA	ATGCACGCGC
801	AGATCAAGAC	GAGCCTGCAC	CGCCTGAAGC	CCGACACGGT	GCCAGCGCCC
851	TGCTGCGTGC	CCGCCAGCTA	CAATCCCATT	GTGCTCATT	AAAAGACCGA
901	CACCGGGGTG	TGCTGCGAGA	CCTATGATGA	CTTGTAGGCC	AAAGACTGCC
951	ACTGCATATG	AGCAGTCTTG	GTCCTTCCAC	TGTGCACCTG	CGCGGGGGAG
1001	GCGACCTCAG	TTGTCTCTGC	CTGTGGAATG	GGCTCAAGGT	TCCTGAGACA
1051	CCCGATTCCCT	GCCCCAAACG	CTGTATTTAT	TAAAAACTCT	GATGATAAAA
1101	ATAAAGCTTG	TCTTGAAGCT	TT		

(57) Abstract

This invention provides proteins which selectively inhibit the proliferation of androgen-independent prostate cancer cells. This invention also provides a nucleic acid molecule encoding the instant proteins, including a nucleic acid molecule suitable for use in gene therapy for treating a subject afflicted with androgen-independent prostate cancer. This invention further provides a composition of matter which selectively kills androgen-independent prostate cancer cells, and comprises the instant proteins and a toxic moiety operably affixed thereto. Finally, the instant invention provides related pharmaceutical compositions and methods for treating androgen-independent prostate cancer.