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(54) Title: NUCLEIC ACID-BASED REGULATION OF THE MOTOR END PLATE

(57) Abstract: The invention relates to a nucleic acid molecule for modulating neuromuscular transmission, the nucleic acid molecule comprising a sequence encoding one or more receptors of the motor end plate or fragments thereof. The invention further relates to a fusion protein, preferably comprising one or more features of any one or more of the preceding claims, said fusion protein comprising a receptor of the motor end plate and/or fragments thereof, wherein said receptor of the motor end plate is an acetylcholine receptor (AChR), a muscle-specific receptor tyrosine kinase (MuSK), and/or a glutamate receptor, and/or fragments thereof, and/or a neurotoxin, wherein the neurotoxin is a botulinum toxin (BoNT) and/or a tetanus toxin.



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