



Article

Longevity-Associated Variant of BPIFB4 Confers Neuroprotection in the STHdh Cell Model of Huntington Disease

Monica Cattaneo ¹, Anna Maciag ¹, Maria Serena Milella ¹, Elena Ciaglia ², Antonino Bruno ^{3,4}
and Annibale Alessandro Puca ^{1,2,*}

¹ Cardiovascular Department, IRCCS MultiMedica, 20138 Milan, Italy

² Department of Medicine, Surgery and Dentistry “Scuola Medica Salernitana,” University of Salerno, 84081 Salerno, Italy

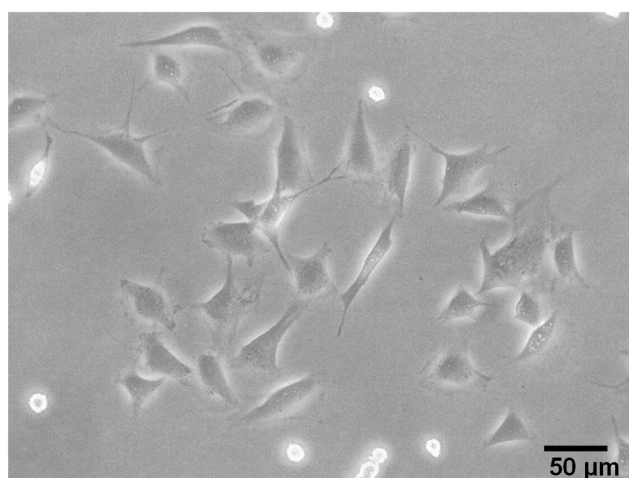
³ Laboratory of Innate Immunity, Unit of Molecular Pathology, Biochemistry and Immunology, IRCCS MultiMedica, 20138 Milan, Italy

⁴ Laboratory of Immunology and General Pathology, Department of Biotechnologies and Life Sciences (DBSV), University of Insubria, 20138 Varese, Italy

* Correspondence: apuca@unisa.it

Abstract: Huntington’s disease

Precursors_STHdh^{Q111/111}_E



Neuron-like_STHdh^{Q111/111}_E

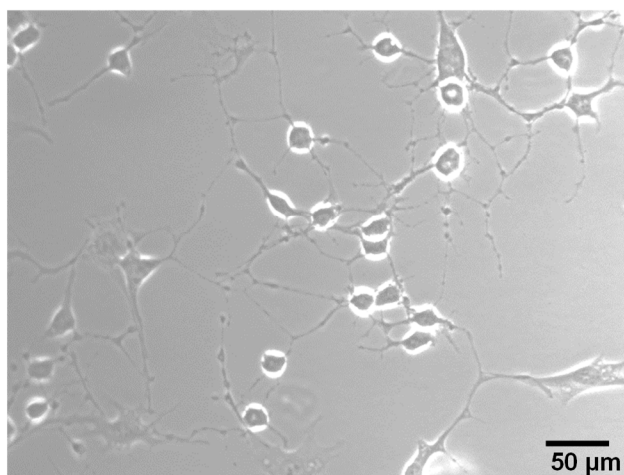


Figure S1. Morphological changes acquired by the STHdh^{Q111/111}_E cells after the differentiation into neuron-like cells. Compared to precursors, the differentiated cells acquired a neuron-like features characterized by elongated branching structures stemming from the cell bodies.

Table S1. Primers employed in Realtime RT-PCR experiments.

Gene	Forward	Reverse
mouse FosB	ACCTGTCTTCGGTGGACTCCTT	TGGCTGGTTGTGATTGCCGTGA
mouse Nur77	GTGCAGTCTGTGGTGACAATGC	CAGGCAGATGTACTTGGCGCTT
mouse Fos	GGGAATGGTGAAGACCGTGTCA	GCAGCCATCTTATTCCGTTCCC
mouse Npas4	TAGCCCTACTGGACGTTTC	CGGTAGTGTTGAGAAGAAGCTT
mouse BPIFB4	CAATTCAGAAGAGTGACGCCT	CGAGGATGAGTCTGCCGCCGAT
mouse H3.1	CTGATCCGCAAGCTGCCGTTT	GTTGGTGTCTCTCAAACAGACCC

Table S2. Antibodies and experimental conditions employed for Western blot.

ANTIGEN	COMPANY (CATALOG N°)	DILUTION	HOST AND CLONALITY	INCUBATION TIME AND TEMPERATURE	SECONDARY ANTIBODY	INCUBATION TIME
BPIFB4	Clinsciences (Custom Made)	1:1000	Rabbit Polyclonal	16 hr, +4°C	ECL Rabbit IgG HPR linked 1:3000	1 hr, TM
YH2AX	Biolegend; 613402	1:1000	Mouse Monoclonal	16 hr, +4°C	ECL Mouse IgG HPR linked 1:3000	1 hr, TM
H2AX	Cell Signaling; 7631	1:1000	Mouse Monoclonal	16 hr, +4°C	ECL Mouse IgG HPR linked 1:3000	1 hr, TM
Caspase-3	Cell Signaling; 14220	1:1000	Rabbit Polyclonal	16 hr, +4°C	ECL Rabbit IgG HPR linked 1:3000	1 hr, TM
H3K9me3	Abcam; ab8898	1:500	Rabbit Polyclonal	16 hr, +4°C	ECL Rabbit IgG HPR linked 1:3000	1 hr, TM
H3	Abcam; ab1791	1:1000	Rabbit Polyclonal	16 hr, +4°C	ECL Rabbit IgG HPR linked 1:3000	1 hr, TM
β-actin	Abcam; ab6276	1:3000	Mouse Monoclonal	16 hr, +4°C	ECL Mouse IgG HPR linked 1:3000	1 hr, TM
Vinculin	Sigma; V9131	1:1000	Mouse Monoclonal	16 hr, +4°C	ECL Mouse IgG HPR linked 1:3000	1 hr, TM