## **Supplementary Fig.5**

TIMP-1

TNF-α

VEGF

Leptin.

0.55

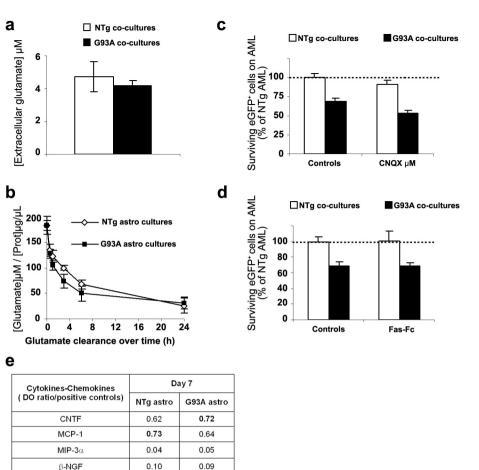
0.04

0.19

0.65

0.04

0.27



**Supplementary Fig.5:** Glutamate, Fas ligand and several major cytokines and chemokines are not involved in the toxicity of mutant SOD1 astrocytes to motor neurons. (a) Extracellular glutamate concentrations measurement by HPLC at 7 d post–plating in co–cultures made of  $^{NTg}$ pMN plated on  $^{NTg}$ AML or  $^{G93A}$ AML did not differ (Student t–test; P=1.0). (b) 14 d–old confluent  $^{NTg}$ AML or  $^{G93A}$ AML were incubated with 200  $\mu$ M of glutamate. Then, the extracellular

concentration of glutamate was monitored by HPLC at 0, 0.5, 1, 3, 6 and 24 hr. No interaction was found between the timing of glutamate decrease in the medium and the genotypes of the two astrocyte layers ( $F_{[2,24]}$ = 0.430; P=0.826; ANOVA). (c) Application of 100  $\mu$ M of CNQX, a potent AMPA/kainite receptor antagonist, did not influence mutant SOD1 astrocyte–mediated motor neuron death. (d) Incubation of the co–cultures with 1  $\mu$ g/mL of Fas–Fc, the inhibitor of soluble Fas ligand, did not improve motor neuron survival on mutant astrocyte layer. (e) The relative contents of 19 cytokines/chemokines were screened by array in CMd from G93A and NTg astrocytes. Only, the 7 molecules with detectable quantities were reported in the table. The genotypic differences were highlighted in bold. The other 12 screened molecules with

undetectable levels were: CINC-2/3, Fractalkine, GM-CSF, IL-1α/1β/4/6/10, IFN-γ, LIX, and