# Ataxin3 Antibody (Ataxin 3) Cat. # AB401

## Background

Ataxin 3 is the disease protein in spinocerebellar ataxia type 3. Ataxin 3 contains a josephin domain and can cleave poly-ubiquitin chains in vitro<sup>1</sup>. The proteolytic activity of Ataxin 3 regulates the amount of both total cellular ubiquitylation and ataxin 3 protein<sup>2,3</sup>.

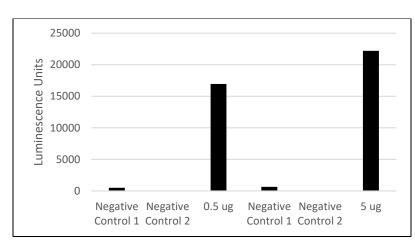
Alternate Names: AT3, Ataxin-3, ATX3, JOS, Machado-Joseph disease protein 1, MJD, MJD1, SCA3, Spinocerebellar ataxia type 3 protein

Molecular Weight: 41kDa

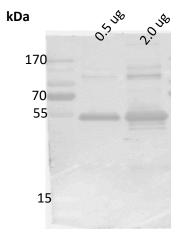
## Specificity/Applications

Species Cross Reactivity:	Human
Source:	Chicken
Applications:	WB
Recommended Antibody D	<b>vilutions:</b> Western Blotting: Robust detection of 0.5ug of recombinant protein was possible when antibody was used at a final concentration of 9.71μg/mL
Storage:	Supplied in phosphate buffered saline. Store at -20°C or below. Avoid repeated freeze/thaw cycles.

### Detection of Ataxin3 by AB401 using ELISA and Western Blot



0.5 or 5 ug of Ataxin3 was coated on ELISA plate. Subsequently, unbound proteins were washed away and blocked with BSA. Ataxin3 was detected by 1.94 ug/mL of AB401 using traditional ELISA detection reagent. 2° Antibody:  $\alpha$ -Chicken HRP (1:5000). Negative Control 1: No AB401 Negative Control 2: no detection reagent.



Indicated amounts of Ataxin3 were loaded on SDS-PAGE gel followed by Western Blot. The blot was detected by 9.71 ug/mL of AB401. 2<sup>0</sup> Antibody: α-Chicken HRP (1:5000).

All products are for research use only • Not intended for human or animal diagnostic or therapeutic uses Copyright © 2007 LifeSensors, Inc. All Rights Reserved

#### References

- 1) Schmitt, I et al. *Inactivation of the mouse Atxn3 (ataxin-3) gene increases protein ubiquitination.* Biochem Biophys Res Commun. 2007. 362(3): p734-9
- 2) Todi, SV et al. *Cellular turnover of the polyglutamine disease protein ataxin-3 is regulated by its catalytic activity.* J Biol Chem. 2007. 282(40): p29348-58.
- **3)** Burnett, B. et al. *The polyglutamine neurodegenerative protein ataxin-3 binds polyubiquitylated proteins and has ubiquitin protease activity.* Hum Mol Genet. 2003. 12(23): p3195-205.

All products are for research use only • Not intended for human or animal diagnostic or therapeutic uses Copyright © 2007 LifeSensors, Inc. All Rights Reserved

