

[Studien -] Publiziert 2001-02-04 00:00:00

Whatley-Studie

Abstrakt (Kurzfassung)

1: Neuroreport 1998 May 11;9(7):1391-5

Related Articles, Books, LinkOut

Phosmet induces up-regulation of surface levels of the cellular prion protein.

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Chronic (2 day) exposure of human neuroblastoma cells to the organophosphate pesticide phosmet induced a marked concentration-dependent increase in the levels of PrP present on the cell surface as assessed by biotin labelling and immunoprecipitation. Levels of both phospholipase C (PIPLC)-releasable and non-releasable forms of PrP were increased on the plasma membrane. These increases appear to be due to post-transcriptional mechanisms, since PrP mRNA levels as assessed by Northern Blotting were unaffected by phosmet treatment. These data raise the possibility that phosmet exposure may increase the risk to prion diseases by altering the levels of PrP accessible to external prions.