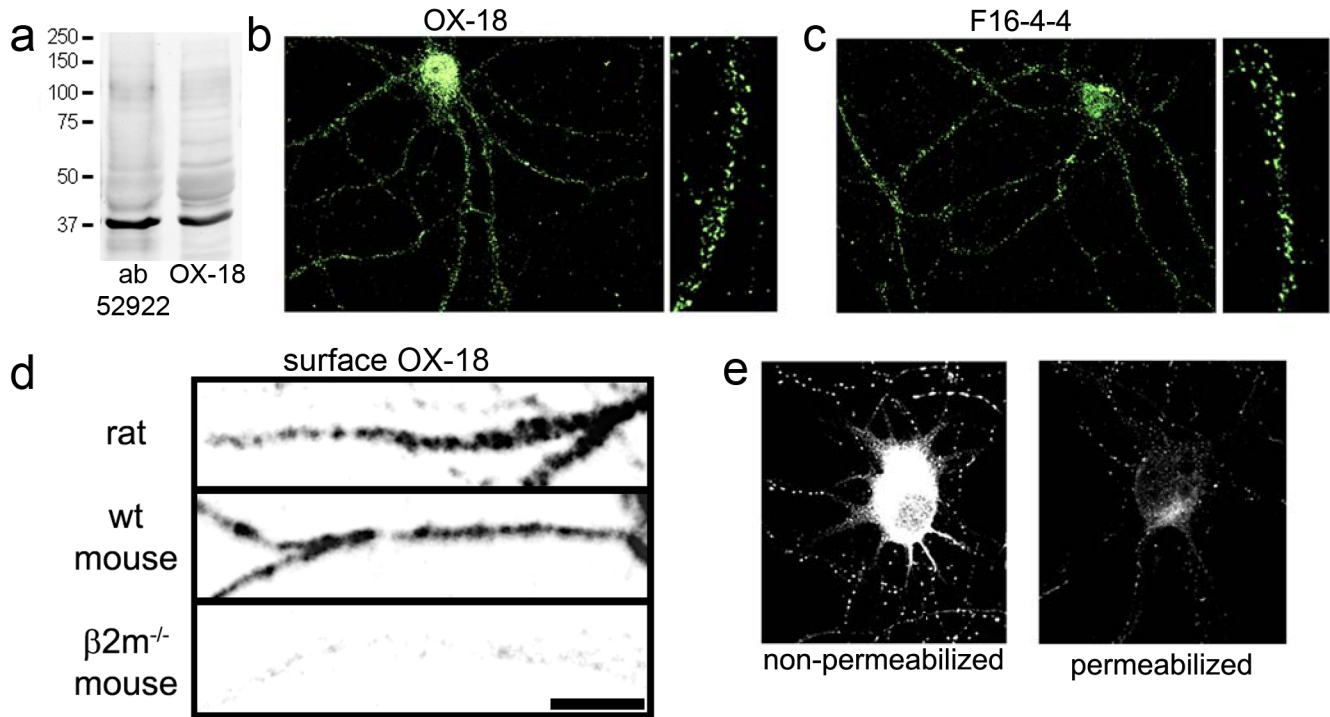


## MHC Class I negatively regulates synapse density during the establishment of cortical connections

Marian W. Glynn<sup>1,2</sup>, Bradford M. Elmer<sup>†1</sup>, Paula A. Garay<sup>†1</sup>, Xiao-Bo Liu<sup>1</sup>, Leigh A. Needleman<sup>1</sup>, Faten El-Sabeawy<sup>1</sup>, and A. Kimberley McAllister<sup>\*1</sup>



**Suppl. Fig. 1. OX-18 specifically recognizes MHCI molecules in developing visual cortical neurons.** (a) Western blot immunoprobed with two anti-Rt1A MHCI antibodies (OX-18 and ab52922) show similar band patterns. (b-c) Two distinct anti-MHCI antibodies (OX-18 and F16-4-4) show similar immunostaining patterns in cultured 7 d.i.v. rat visual cortical neurons. (d) OX-18 was used to stain non-permeabilized 8 d.i.v. visual cortical cultures from rat (top), wild type mice (middle), and  $\beta 2m^{-/-}$  mice (bottom). The images show dendritic sMHCI. All images were taken at the same confocal settings for equivalent comparison. The intensity of OX-18 surface staining is drastically decreased in dendrites from  $\beta 2m^{-/-}$  mice compared to WT mouse and rat cultures. Scale bar = 5  $\mu$ m. (e) sMHCI staining of a 7 d.i.v. neuron stained without permeabilization (left) and after permeabilization (right). Both the pattern and intensity of sMHCI staining decreases after permeabilization.