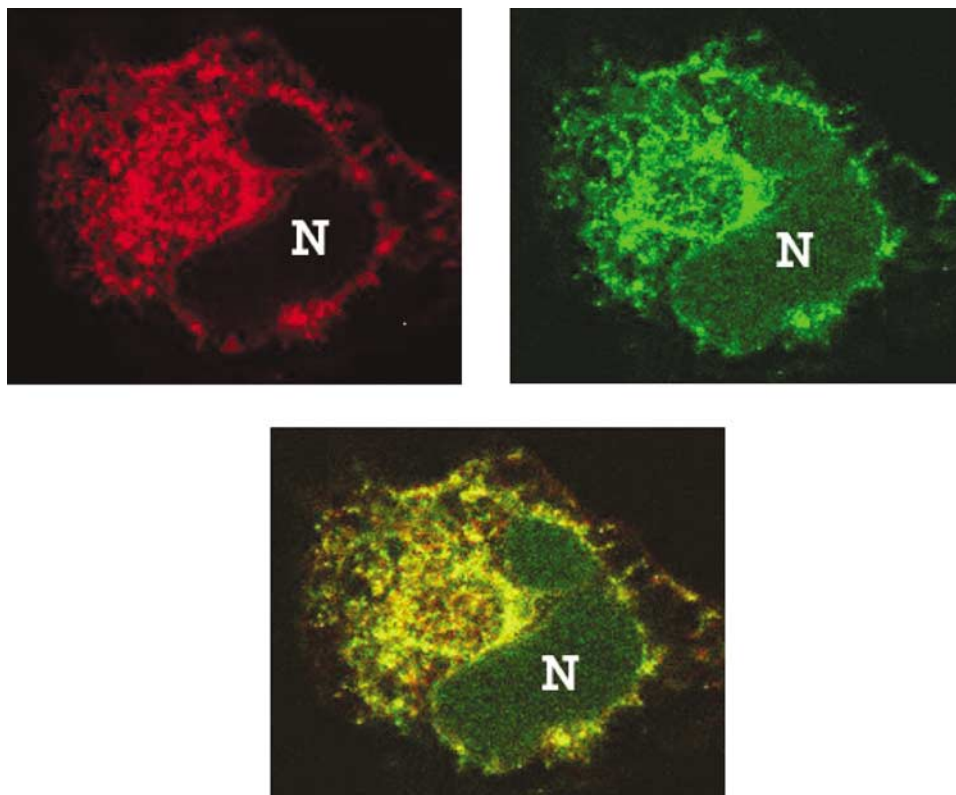


## IMAGE

# Naturally occurring dominant-negative SK3 channel isoform

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In the article on Novel truncated isoform of SK3 potassium channel is a potent dominant-negative regulator of SK currents: implications in schizophrenia is described a potent dominant-negative truncated isoform of the SK3 potassium channel, SK3-1B. In the figure above, confocal fluorescence microscopy demonstrates the colocalization of functional SK3 channel protein with the inhibitory SK3-1B isoform. COS-7 cells that natively do not express SK3 were transfected with both constructs, SK3-1B being tagged with green fluorescent protein (GFP). *Top panel:* Cells stained with antibody (red) specific for only the full-length SK3 channel protein. *Middle panel:* GFP fluorescence (green) showing the distribution of SK3-1B protein. *Lower panel:* Overlay of the two images shows their colocalization, seen as yellow. (N indicates the nucleus). In the article, electrophysiology and confocal microscopy show that this colocalization is the mechanism of dominant-negative inhibition of channel function, and the potential implications of this mechanism in the pathophysiology of schizophrenia are discussed. For more information on this topic, please see the article by Tomita *et al* 524–535 of this issue.