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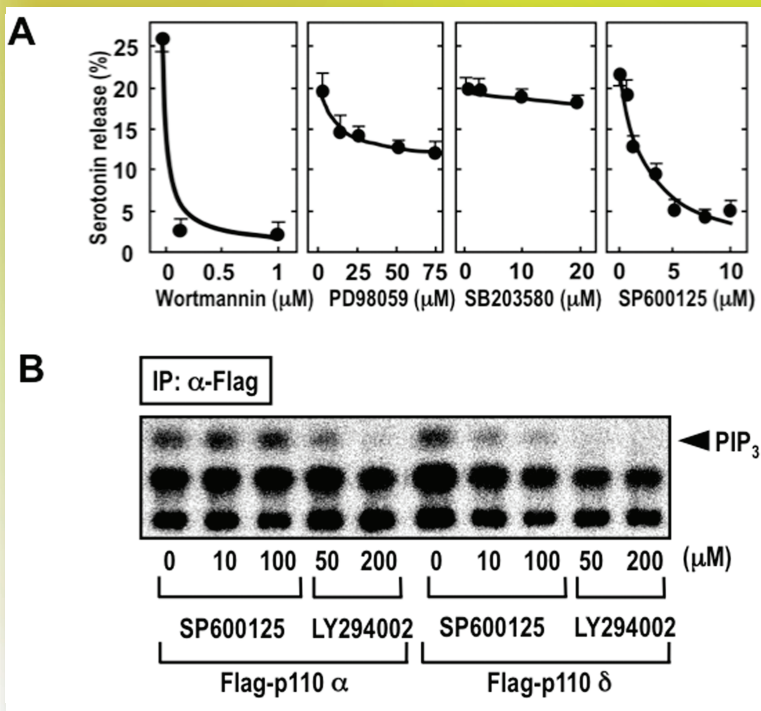
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- Replication and Recombination
- Gene Expression
- Protein Synthesis
- DNA-Protein Interaction
- RNA Processing
- Genetic Engineering
- Genetic Diseases
- Molecular Genetics
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Cytoskeleton, Cell Motility, and Cell Shape
Extracellular Matrices and Cell Adhesion Molecules
Cell Cycle
Receptors and Signal Transduction
Stress Proteins and Molecular Chaperones
Cell Death
Differentiation, Development, and Aging
Neurobiology
Tumor and Immunology

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COVER: SP600125 is used as a specific inhibitor of c-Jun N-terminal kinase (JNK). Fc receptor for IgE (FcεRI)-induced degranulation (serotonin release) in bone marrow-derived mast cells, were almost completely inhibited by SP600125 (A). However, the time course of FcεRI-induced JNK activation did not correlate with that of serotonin release. Instead, SP600125 markedly inhibited the FcεRI-induced activation of phosphatidylinositol 3-kinase (PI3K) the same as a PI3K inhibitor, wortmannin. SP600125 specifically inhibits delta form of p110 catalytic subunit (p110δ) of PI3K (B). Thus, SP600125 exerts its influence on mast cell functions by inhibiting the kinase activity of PI3K but not JNK. [See Tanemura *et al.*; p. 345]