

Isolation of a STAT gene in *Hyphantria cunea*

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Innate immune responses are mediated by the activation of various signaling processes. Signal transducers and activators of transcription (STATs) are latent cytoplasmic transcription factors, which mediate interferon (IFN), interleukin, and some growth factor and peptide hormone signaling in cells.

IFN stimulation results in tyrosine phosphorylation, dimerization, and nuclear import of STATs. A insect member of the STAT family of transcription factors (Hc-STAT) has been cloned from fall webworm, *Hyphantria cunea*. The domains involved in DNA interaction, DNA-binding, and the SH2 domain are well conserved. Hc-STAT is most similar to that of *Spodoptera frugiperda*.