

Gold(i) ethylene complexes supported by electron-rich scorpionates

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**Abstract**

Ethylene complexes of gold(i) have been stabilized by electron-rich,  $\kappa^2$ -bound tris(pyrazolyl)borate ligands. Large up-field shifts of olefinic carbon NMR resonances and relatively long C distances of gold bound ethylene are indicative of significant Au(i)  $\rightarrow$  ethylene  $\pi$ -backbonding relative to the analog supported by a weakly donating ligand, consistent with the computational data.