A variety of amino acids have been reported in various laboratory simulations of prebiotic chemistry in reducing atmospheres. Several indigenous amino acids have also been identified in carbonaceous chondrite meteorites. It has been argued that there is a similarity in the mode of synthesis of these products in Miller-Urey experiments and in meteorites. We report here a comparison of the amino acid products of Miller-Urey type spark discharge experiments, low temperature Titan atmospheric chemistry experiments and the amino acids found in carbonaceous chondrite meteorites as measured by highly-sensitive LC-MS analysis. There does appear to be a large degree of similarity of the products of these different materials which may require a novel mechanism of synthesis to explain.