

carbonium ion

The term should be used with great care since several incompatible meanings are currently in use. It is not acceptable as the root for systematic nomenclature for carbocations.

1. In most of the existing literature the term is used in its traditional sense for what is here defined as carbenium ion.
2. A carbocation, real or hypothetical, that contains at least one five-coordinate carbon atom.
3. A carbocation, real or hypothetical, whose structure cannot adequately be described by two-electron two-centre bonds only. (The structure may involve carbon atoms with a coordination number greater than five.)

Source:

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1093

PAC, 1995, 67, 1307 (*Glossary of class names of organic compounds and reactivity intermediates based on structure (IUPAC Recommendations 1995)*) on page 1325