



**Chandra X-ray  
Observatory Center**

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**Mrk 1216:** A 'red nugget' galaxy located about 295 million light years from Earth.  
(Credit: X-ray: NASA/CXC/MTA-Eötvös University/N. Werner et al.; Illustration: NASA/CXC/M.Weiss )

**Caption:** Astronomers using Chandra found that black holes may have squelched star formation in small, yet massive galaxies known as "red nuggets". These are relics of the first massive galaxies that formed within only one billion years after the Big Bang, some of which have avoided merging with other galaxies throughout cosmic time. This illustration depicts the central black hole in these galaxies, which helps determine how many stars have formed there. The inset shows the Chandra image of one of the galaxies in the latest study, MRK 1216.

**Scale:** The image is about 39 arcsec across (56,000 light years).

*Chandra X-ray Observatory ACIS Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*