

## Origin of high-Mg andesite and associated rhyolite based on remnant organic matter

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Organic matter occurs as inclusions in olivine and clinopyroxene phenocrysts in Middle Miocene high-Mg andesite (HMA), and associated rhyolite from the Setouchi Volcanic Belt, SW-Japan. Contents of total carbonaceous complex excluding carbonate range ca. 100ppm, and up to 10% of this is contained as organic matter. Associated rhyolites show S-type characteristics and were generated by direct melting of subducted slab sediments. Organic matter in the HMA magma was captured from rhyolite magma or as fluid in wedge mantle.