

## Whole-rock chemical composition of basic schists from the Sanbagawa Belt

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Whole-rock chemical compositions of major and trace elements in the Besshi basic schist closely associated with the Besshi massive sulfide deposit from the Sanbagawa Belt are reported. Studied samples were collected from four outcrops around the Dozan-goe, central Shikoku. Common metamorphic mineral assemblage of the basic schist is albite + epidote + actinolite + chlorite +/- muscovite +/- quartz. Major element concentrations are similar to those of typical tholeiitic basalts. Trace element patterns of the basic schist normalized to normal mid-ocean ridge basalt (N-MORB) are generally flat, although highly mobile large-ion lithophile elements are quite variable. Chondrite-normalized rare earth element (REE) patterns show flat to slightly light REE-depleted patterns. In the Hf-Th-Ta and Nb-Zr-Y discrimination diagrams, basic schist samples closely associated with the sulfide deposit are plotted within the N-MORB field. The Th/Nb ratios of the basic schist are also comparable to those of N-MORB. These geochemical lines of evidence indicate that the protolith of the Besshi basic schist is N-MORB and the Besshi sulfide deposit is considered to have been formed by hydrothermal activity in conjunction with MOR volcanism. In this presentation, we also report the chemical compositions of the basic schist from the Asemigawa River and Kokuryogawa River watershed, the Sanbagawa Belt, and discuss their tectonic settings.