t16_setfam_1 (TMS-fqh2bYzwt58pVExRPyhLsLgj5PBUTLHG)

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Let $r1\_setfam\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\neg(X0 \neq k1\_xboole\_0) \wedge (\forall X1.\neg X1 \in X0) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\neg(X0 \in X1) \wedge (v1\_xboole\_0\ X1) \tag{2}$$

Assume the following.

$$v1\_xboole\_0\ k1\_xboole\_0 \tag{3}$$

Assume the following.

$$\begin{gathered}\forall X0.\forall X1.(r1\_setfam\_1\ X0\ X1) \Leftrightarrow (\forall X2.\neg(X2 \in X0) \wedge \\ (\forall X3.\neg(X3 \in X1) \wedge (r1\_tarski\ X2\ X3)))\end{gathered} \tag{4}$$

Theorem 1 $\forall X0.(r1\_setfam\_1\ X0\ k1\_xboole\_0) \Rightarrow (X0 = k1\_xboole\_0)$.