

PROOF.

$$\begin{aligned}
& \rho f \text{ is monovalued} \Leftrightarrow \\
& (\rho f) \circ (\rho f)^{-1} \sqsubseteq 1_{\text{Dst } \rho f} \Leftrightarrow \\
& \rho(f \circ f^{-1}) \sqsubseteq 1_{\text{Dst } \rho f} \Leftrightarrow \\
& \rho(f \circ f^{-1}) \sqsubseteq 1_{\mathcal{P}(\text{Dst } f \times \text{Dst } f)}^{\text{FCD}} \Leftrightarrow \\
& \rho(f \circ f^{-1}) \sqsubseteq \rho 1_{\text{Dst } f}^{\text{RLD}} \Leftrightarrow \\
& f \circ f^{-1} \sqsubseteq 1_{\text{Dst } f}^{\text{RLD}} \Leftrightarrow \\
& f \text{ is monovalued.}
\end{aligned}$$

□