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#4747

## TRA-2-54 (2J) Mouse mAb

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IP	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 80	<b>Source/Isotype:</b> Mouse IgG1	<b>UniProt ID:</b> #P05186	<b>Entrez-Gene Id:</b> 249
<b>Product Usage Information</b>	<b>Application</b>		<b>Dilution</b>			
	Western Blotting		1:1000			
	Immunoprecipitation		1:100			
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.					
<b>Specificity/Sensitivity</b>	TRA-2-54 (2J) Mouse mAb recognizes endogenous levels of total TRA-2-54 protein.					
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with 2102Ep human embryonal carcinoma cells.					
<b>Background</b>	The family of alkaline phosphatases in humans is comprised of four members: intestinal, placental, placental-like (germ cell type), and tissue nonspecific. The tissue nonspecific isozyme is also known as the liver/bone/kidney alkaline phosphatase due to its expression in these tissues. It is also highly expressed in embryonic stem (ES) and embryonic carcinoma (EC) cells and is lost as these cells undergo differentiation (1,2). The TRA-2-54 (2J) Mouse mAb specifically detects this isozyme and does not detect the other family members, making it a useful tool for tracking the pluripotency status of ES and EC cells in culture.					
<b>Background References</b>	<ol style="list-style-type: none"> <li>Andrews, P.W. et al. (1996) <i>Int J Cancer</i> 66, 806-16.</li> <li>Draper, J.S. et al. (2002) <i>J Anat</i> 200, 249-58.</li> </ol>					

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	<b>IMPORTANT:</b> For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
<b>Applications Key</b>	<b>W:</b> Western Blotting <b>IP:</b> Immunoprecipitation
<b>Cross-Reactivity Key</b>	<b>H:</b> Human
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