









**Polyclonal Rabbit
Anti-Human S100A4
Code No. A5114**

For research use only. Not for use in diagnostic procedures.

Recommended use	Polyclonal Rabbit Anti-Human S100A4 is recommended for use in immunocytochemistry. The antibody labels S100A4 positive cells.
Synonym for Antigen	CAPL, MTS1.
Introduction	The S100A4 protein belongs to the S100 subfamily, which has grown to be one of the largest subfamilies of the EF-hand Ca^{2+} -binding proteins (1). The S100 proteins are small (10-12 kDa), acidic proteins sharing 25-65% sequence homology. A majority of the S100 genes cluster on human chromosome 1q21. The discovery of this cluster (2) has provided the basis for a new nomenclature for S100 proteins encoded by genes in the 1q21 region. These proteins are now designated S100A1-S100A13 (2, 3).
Reagent provided	Purified immunoglobulin fraction of rabbit antiserum provided in liquid form. In 0.1 mol/L NaCl, 15 mmol/L NaN_3 , pH 7.2. <u>Protein concentration g/L:</u> See label on vial.
Storage	2-8 °C.
Immunogen	Purified recombinant human S100A4 monomer expressed by <i>E. coli</i> .
Specificity	In immunoblotting analysis using recombinant S100 proteins (S100A1, S100A2, S100A4, S100A6 and S100B) only the corresponding antigen (S100A4) was recognized by the A 5114 antibody. No cross-reaction with the other S100 proteins was observed. As demonstrated by immunocytochemistry, the antibody cross-reacts with the S100A4 equivalent protein in cat, cow, dog, horse, mouse and rat.
Precautions	<ol style="list-style-type: none">1. The device is not intended for clinical use including diagnosis, prognosis, and monitoring of a disease state, and it must not be used in conjunction with patient records or treatment.2. This product contains sodium azide (NaN_3), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, sodium azide may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing.3. As with any product derived from biological sources, proper handling procedures should be used.
Specimen preparation	<u>Paraffin sections:</u> The antibody can be used for labelling paraffin-embedded tissue sections fixed in formalin. Pre-treatment of tissues with heat-induced epitope retrieval is recommended. Optimal results are obtained with Dako Target Retrieval Solution, code No. S1700, Dako Target Retrieval Solution, Citrate pH 6, code No. S2369, Dako Target Retrieval Solution, pH 9, code No. S2368, or Dako Target Retrieval Solution, High pH, code No. S3308. The tissue sections should not dry out during the treatment or during the following immunocytochemical staining procedure.
Staining procedure	<u>Dilution:</u> Polyclonal Rabbit Anti-Human S100A4, may be used at a dilution range of 1:100-1:200 when applied on formalin-fixed, paraffin-embedded sections of human tonsil and using 20 minutes heat-induced epitope retrieval in Dako Target Retrieval Solution, code No. S1700, and 30 minutes incubation at room temperature with the primary antibody. Optimal conditions may vary depending on specimen and preparation method, and should be determined by each individual laboratory. The recommended negative control is Dako Rabbit Immunoglobulin Fraction (Solid-Phase Absorbed), code No. X0936, diluted to the same rabbit concentration as the primary antibody. <u>Visualization:</u> DAKO LSAB [®] + /HRP kit, code No. K0679, and DAKO EnVision [™] + /HRP kits, code No. K4004 and K4006, are recommended. Follow the procedure enclosed with the selected visualization kit.
Performance characteristics	Cells labelled by the antibody display nuclear, cytoplasmic and/or membrane staining. <u>Normal tissues:</u> The antibody was found to label fibroblasts, neuronal structures, T-lymphocytes, plasma cells and Kupffer cells.
References	<ol style="list-style-type: none">1. Schäfer BW, Heizmann CW. The S100 family of EF-hand calcium-binding proteins: functions and pathology. Trends Biochem Sci 1996;21:134-40.

2. Engelkamp D, Schafer BW, Mattei MG, Erne P, Heizmann CV. Six S100 genes are clustered on human chromosome 1q21: identification of two genes coding for the two previously unreported calcium-binding proteins S100D and S100E. Proc Natl Acad Sci 1993;90:6547-51.
3. Schäfer BW, Wicki R, Engelkamp D, Mattei M-G, Heizmann CW. Isolation of a YAC clone covering a cluster of nine S100 genes on human chromosome 1q21: Rationale for a new nomenclature of the S100 calcium-binding protein family. Genomics 1995;25:638-43.

Explanation of symbols

 REF	Catalogue number	 2°C - 8°C	Temperature limitation		Use by
	Consult instructions for use	 LOT	Batch code		Manufacturer