

DESCRIPTION

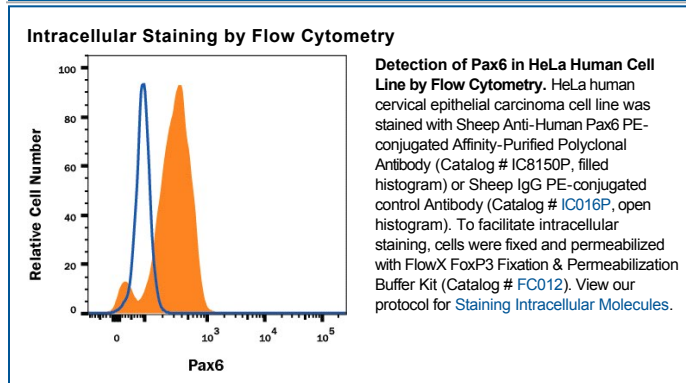
Species Reactivity	Human
Specificity	Detects human Pax6 in direct ELISAs. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) Pax1, rhPax2, rhPax3, rhPax4, rhPax5, and rhPax7 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Pax6 Met1-Arg272 Accession # P26367
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	10 μ L/ 10^6 cells	See Below

DATA



PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage **Protect from light. Do not freeze.**

- 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Pax6 (paired box 6; also Oculorhombin) is a 48-50 kDa member of the paired homeobox family of transcription factors. It is expressed in developing optic vesicle, olfactory dopaminergic neurons, and pancreatic endocrine cells. Pax6 is a transactivating protein that interacts with MAF, CDX2 and SOX2. Human Pax6 is 422 amino acids (aa) in length. It contains an N-terminal paired box DNA-binding domain (aa 4-130), a Gly-rich central region (aa 131-209), a homeodomain (aa 213-269) and a C-terminal Pro/Ser/Thr-rich regulatory domain (aa 279-422). Phosphorylation of the C-terminal domain at Thr281/304/373 promotes Pax6 activity. Multiple splice forms of Pax6 exist. There are alternative start sites at Met137 and a position 34 aa upstream of the standard site. There is also a deletion of aa 22-26 and 37-39, plus a 14 aa insertion after Gln47 that generates a C-terminal DNA binding site. Human and mouse Pax6 are absolutely identical in aa sequence.