

PAX3 Polyclonal Antibody

Catalog Number: E91675 Amount: 100ul

Background: Paired box (PAX) proteins are a family of transcription factors that play important and

diverse roles in animal development (1). Nine PAX proteins (PAX1-9) have been described in humans and other mammals. They are defined by the presence of an amino-terminal "paired" domain, consisting of two helix-turn-helix motifs, with DNA binding activity (2). PAX proteins are classified into four structurally distinct subgroups (I-IV) based on the absence or presence of a carboxy-terminal homeodomain and a central octapeptide region. Subgroup I (PAX1 and 9) contains the octapeptide but lacks the homeodomain; subgroup II (PAX2, 5, and 8) contains the octapeptide and a truncated homeodomain; subgroup IV (PAX4 and 7) contains the octapeptide and a complete homeodomain; and subgroup IV (PAX4 and 6) contains a complete homeodomain but lacks the octapeptide region (2). PAX proteins play critically important roles in development by regulating transcriptional networks responsible for embryonic patterning and organogenesis (3); a subset of PAX proteins also maintain functional importance during postnatal development (4). Research studies have implicated genetic mutations that result in aberrant expression of PAX genes in a number of cancer subtypes (1-3), with members of subgroups II and III identified as potential mediators of tumor progression (2).

Species: Rabbit **Isotype:** IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide,

50% glycerol, pH7.3.

Synonyms: PAX3; CDHS;HUP2;WS1;WS3;Paired box protein Pax-3;HuP2;

Immunogen: Recombinant proteinof human PAX3

Purification: Affinity purification

Reactivity: H M R
Applications: WB IHC
Molecular Weight: 50kDa
Swiss-Prot No.: P23760
Gene ID: 5077

References: 1. Lang, D. et al. (2007) Biochem Pharmacol 73, 1-14. 2. Robson, E.J. et al. (2006) Nat Rev

Cancer 6, 52-62. 3. Wang, Q. et al. (2008) J Cell Mol Med 12, 2281-94. 4. Blake, J.A. et al.

(2008) Dev Dyn 237, 2791-803.

